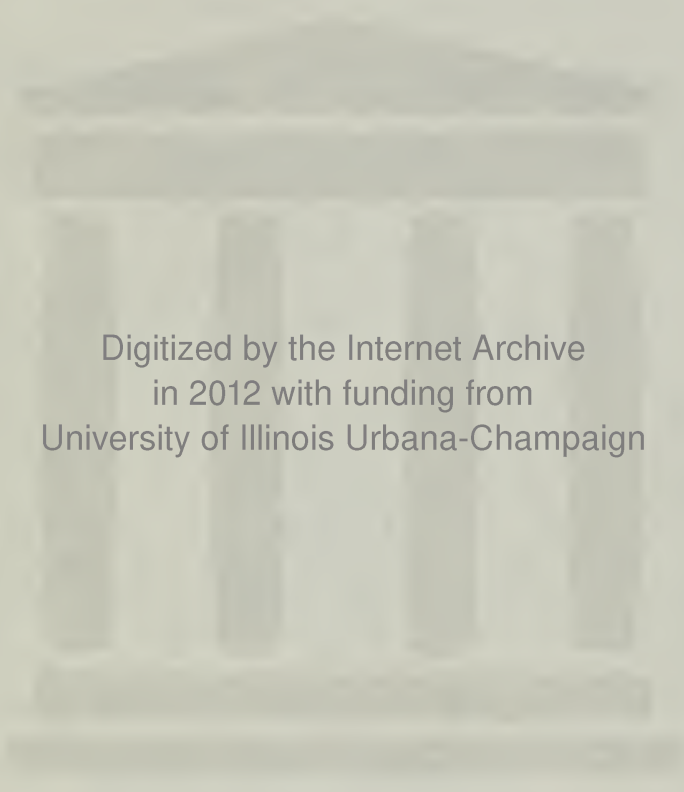


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May, 1922.

BULLETIN
OF THE
**Virginia Polytechnic
Institute**

The State Agricultural and Mechanical College



SEMI-CENTENNIAL
A Brief History of the College

PUBLISHED BI-MONTHLY BY THE
VIRGINIA POLYTECHNIC INSTITUTE, BLACKSBURG, VA.

"SERVICE TO THE STATE AND NATION"

A BRIEF HISTORY

OF THE

Virginia Agricultural and Mechanical College and Polytechnic Institute



1872-1922

WITH THE EXCEPTION OF THE SUPPLEMENT, THE CONTENTS
WERE PREPARED BY PROFESSOR E. A. SMYTH.

The Bulletin of the Virginia Polytechnic Institute is published bi-monthly. Entered as second-class matter January 29, 1908, at the post office at Blacksburg, Virginia, under the Act of July 16, 1894.

A LIST OF THE PRESIDENTS OF THE COLLEGE
SINCE ITS ESTABLISHMENT

1872-1879—DR. C. L. C. MINOR

1879-1880—VACANT

1880-1881—DR. JOHN L. BUCHANAN

1881-1886—PROF. THOMAS N. CONRAD

1886-1891—GEN. L. L. LOMAX

1891-1907—DR. JOHN M. MCBRYDE

1907-1913—DR. PAUL B. BARRINGER

1913-1919—DR. JOSEPH D. EGGLESTON

1919-____—DR. JULIAN A. BURRUSS

A Brief History of the Virginia Agricultural and Mechanical College and Polytechnic Institute

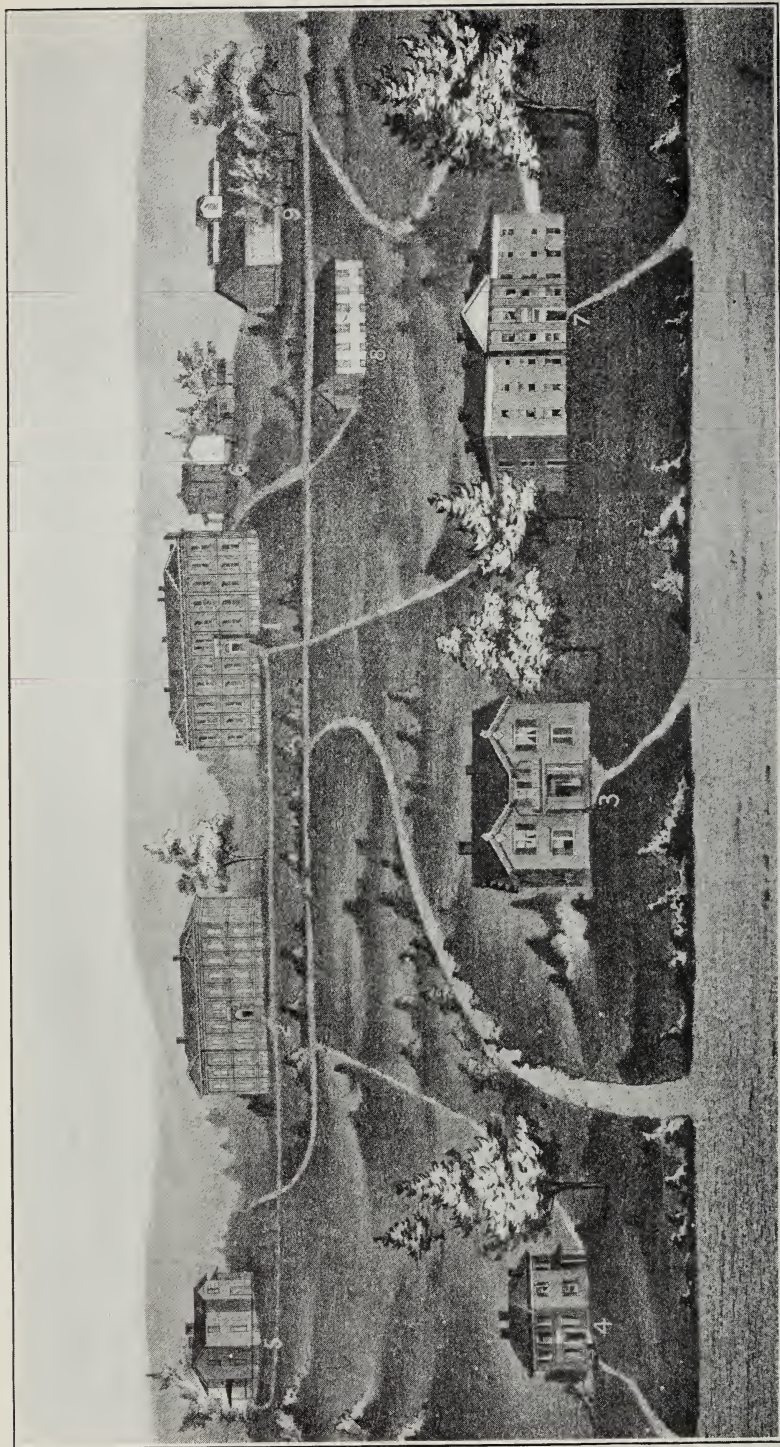
By an act of Congress passed in 1862 large grants of public land were made to each State, the proceeds from the sale of which were to endow state colleges. It was required that the main subjects taught should relate directly to agriculture and the mechanic arts, and that military instruction should be given. Scientific subjects and the classics were however not excluded. Such colleges were therefore known as "Agricultural and Mechanical Colleges."

In 1872 the General Assembly of Virginia met the requirements and accepted the provisions of this act with Virginia's share of the land grant. The Richmond Dispatch of March 20, 1872, contains this paragraph, namely,

Governor Walker has appointed the following to compose the board of visitors to the Virginia Agricultural and Mechanical College: Harvey Black, of Montgomery County; John T. Cowan, of Pulaski; Joseph Cloyd, of Pulaski; W. Alexander Stewart, of Smyth; Joseph R. Anderson, of Richmond; William T. Sutherlin, of Danville; Robert Beverley, of Fauquier; and D. C. DeJarnette, of Caroline.

There was some contention as to the best locality for this new school, and various sections urged their claims. At this time the Preston family owned large estates near Blacksburg in Montgomery County, and Judge Waller R. Staples, of Christiansburg, a close friend of the Preston family, championed Montgomery County's claims for the location of the school at Blacksburg. The county raised the sum of \$20,000 and offered also a brick building and grounds at Blacksburg, known as the Preston and Olin Institute, as a nucleus for the college. Success crowned these efforts, and so now the Virginia Polytechnic Institute and Blacksburg are synonymous to many.

The large farm known as "Solitude," owned by Col. Robert Preston, which was one of the three large Preston farms adjoining each other, was purchased and forms now a large part of the grounds of the college. The mansion still known as "Solitude," now the residence of Professor Saunders, is said to be an enlargement of the original hewn-log house, and is one of the oldest houses in the neighborhood.



1 & 2. College Buildings. 3. President's House. 4, 5, & 6. Professors' Houses. 7. Barracks. 8. Workshop. 9. Commencement Hall.
VIRGINIA AGRICULTURAL & MECHANICAL COLLEGE
Reproduced from an old lithograph made by A. Hoen & Co., Richmond, Va., and published in an encyclopedia.

THE EARLY YEARS

The Virginia Agricultural and Mechanical College opened in 1872, having as its only building the Preston and Olin Institute structure. Old alumni will remember that this building, converted into three stories, later used as a dormitory, then again restored to two stories and used as the shops building, afterwards forming the nucleus of the quadrangle shops building, was destroyed by fire in 1913. This building was on the hill, just within the present alumni gateway.

The first president was Dr. C. L. C. Minor, and his faculty consisted of Gray Carroll, professor of mathematics; Dr. Charles Martin, professor of English; and General James H. Lane, of North Carolina, who had fought at Manassas, was commandant and professor of mathematics. The students roomed and boarded where they could in town, as there was no dormitory and no mess; and this occasioned the construction of the long, one-storied building of many rooms on the cross street west of the present Presbyterian church, now known as "Lybrook Row," where many of the cadets roomed. In those days the building was known by a less euphonious name, doubtless in keeping with the actions of the inmates. These students took their meals in the building now owned by Dr. Roop, then known as "Luster's Hotel."

In 1873 Mr. C. W. C. Davis was made professor of mechanics, and Dr. M. G. Elzy professor of chemistry and agriculture. Until September, 1882, the sessions extended through the summer, and there was a winter vacation. In 1874 Professor Davis was replaced by Mr. Jackson, who soon resigned, being succeeded by General Boggs. In the same year the buildings known as the First and Second Academic Buildings were begun; a house was built for the president, which is now the main part of the infirmary; and three professors' houses were added. One of these latter, remodeled since partial destruction by fire, is now the administration building; one, the present commandant's house; and the third, later used as a lecture hall for the agricultural department in the time of Professor Nourse, was removed to give room for the present library, built originally for the college auditorium, and the material of this house was used in the construction of the house now occupied by Professor Burkhart. These six buildings were constructed with money appropriated by the Legislature for the purpose. The whole amount was \$60,000, and about 60% went into these buildings.

Shortly after organization, the faculty was divided into two factions as to policy, discipline, and management of the school. This resulted in a personal difficulty between the president and the commandant. Recognizing that under such conditions the college could not succeed, the board of visitors removed President Minor and Professor Martin in November, 1879, and elected Thomas N. Conrad as professor of English. On December 10, 1879, Dr. John L. Buchanan

CATALOGUE
OF THE
OFFICERS AND STUDENTS
OF THE
Virginia Agricultural & Mechanical College.
FIRST SESSION.
1872-'73.

CLEMMITT & JONES,
STEAM BOOK AND JOB PRINTERS.
1873.

BOARD of VISITORS.

HARVEY BLACK, M. D., - - - - - RECTOR.

HIS Excellency, G. C. WALKER, GOVERNOR OF VIRGINIA, *Ex officio*.

HON. J. C. TAYLOR, ATTORNEY GENERAL, *Ex officio*.

REV. W. H. RUFFNER, D. D., SUP'T OF PUBLIC INSTRUCTION, *Ex officio*.

GEN. W. H. F. LEE, PRESIDENT STATE AGRICULTURAL SOCIETY, *Ex officio*.

Gen. J. R. ANDERSON, *Richmond*.

Hon. JOHN GOODE, JR., *Norfolk*.

Col. JOHN E. PENN, *Patrick*.

} Appointed by the
Governor for three years.

ROBERT BEVERLEY, Esq., *Fauquier*.

W. A. STUART, Esq., *Smythe*,

E. M. TIDBALL, Esq., *Frederick*.

} Appointed by the
Governor for two years.

HARVEY BLACK, M. D., *Montgomery*.

Hon. D. C. DeJARNETTE, *Caroline*.

Maj. W. T. SUTHERLIN, *Pittsylvania*.

} Appointed by the
Governor for one year.

V. E. SHEPHERD, - - - - - SECRETARY.

was elected president. The Legislature of 1879-80 removed the entire board of visitors, and the Governor made his new appointments so late that they were not confirmed. They nevertheless acted, and continued in office until 1881-82. This board decided on a complete reorganization of the college, and in 1880 declared all chairs and offices of the college vacant.

Dr. Buchanan thus served for only six months, for at the next meeting in August an entire new faculty was elected. General Scott Shipp, the late distinguished superintendent of the Virginia Military Institute, was made president, with a faculty composed as follows: Dr. M. P. Scott, chemistry and agriculture; J. E. Christian, mathematics and physics; Colonel W. W. Blackford, mechanics. Later Colonel Blackford was appointed superintendent of buildings and grounds, and to him we owe the beginning of our lovely campus, so much admired by visitors. Mr. Hart was elected professor of English. General Lane resigned and the position of commandant was not filled until 1885. But very little stress was laid on the military feature, the board of visitors having required the faculty to reduce it to the minimum within the terms of the law.

General (then Colonel) Scott Shipp accepted the presidency, but resigned within a day of his arrival on the grounds, and Mr. Hart acted in that capacity during the session of 1880-81. In June, 1881, Dr. John L. Buchanan was again elected president. If conditions had been better, Dr. Buchanan would doubtless have exerted a marked influence for good on the future of the college, for he was already well known as an educator and he was a gentleman of comprehensive mind and liberal culture. Dr. Buchanan has recently died, in January, 1922, at the advanced age of 93 years, having in his time filled such important positions as president of Emory and Henry College, Randolph-Macon College, Martha Washington College, Vanderbilt University, and the University of Arkansas, besides the Virginia Agricultural and Mechanical College.

The board which elected Dr. Buchanan to the presidency at Blacksburg, and which doubtless would have supported him, was removed by the Legislature of 1881-82. Governor Cameron, elected by the Coalition-Readjuster party, appointed an entirely new board, which unfortunately deemed it necessary to reorganize the college. In January, 1882, this board declared all chairs and offices vacant, except that of treasurer. Captain Thomas N. Conrad was made president, and in February the board met and re-elected Professors Scott and Christian, elected Mr. J. X. Morton professor of Latin and primary English, and Mr. Grimm professor of English. Professor Grimm, however, did not serve and his place was taken by Professor Morton. Later, Mr. V. E. Shepard was selected to instruct in modern languages, and was subsequently given a professorship. Colonel William Ballard Preston was requested to give lectures on agriculture and to instruct in military science and tactics.

In 1884, upon request of the board for the detail of an army officer, Lieutenant John C. Gresham, of the 7th U. S. Cavalry, was chosen

as commandant of cadets and professor of military science and tactics. He reported for duty in July, 1885. Preferring work in the field, however, he resigned in 1887, after proving himself to both students and faculty an efficient and popular officer.

Upon the election of Governor Fitzhugh Lee, another board of visitors was appointed, which at once proceeded to reorganize the college. General L. L. Lomax, a distinguished officer of the Confederacy, was elected president, and Professors Scott, Christian, Morton, and Preston were re-elected. Mr. James H. Fitts, a former ensign of the Navy and an Annapolis graduate, was elected professor of mechanics and manager of the shops, and Mr. Fielding P. Miles, professor of



A demonstration by the students during the days of "Mahonism." This building was then used as a dormitory and afterwards as shops. Dr. T. N. Conrad was then president.

chemistry. These gentlemen assumed charge of their departments in July, 1885. Lieutenant John T. Knight, of the 3rd U. S. Cavalry, a native of Virginia, was detailed as commandant of cadets and reported for duty in August, 1887, serving until 1890.

An agricultural experiment station having been established in connection with the college in 1888, Colonel Ballard Preston was elected director of the station and professor of agriculture. In the same year, from money appropriated by the Legislature, a new brick barrack building was erected at a cost of about \$20,000. The bricks for the building were made locally and a handsome grove that stood west of the experiment plats, beyond the Price's Forks road was sacrificed for burning the bricks. This building was steam-heated and equipped with furniture made at the college shops, which were then in the small wooden building east of the present mess-hall. This brick barrack was known as the "New Barracks," now referred to as "The Old Barracks" or "Barrack No. 1." Up to the building of this the

students were quartered in the Preston-Olin building, later remodeled by General Lomax for a machine shop.

In June, 1889, the board established the chair of French and German, and Mr. T. P. Campbell was elected thereto, reporting for duty in September of that year. Professor Campbell is still in charge of this department, being at present, in point of service, the oldest member of the faculty.

The year 1890 saw many changes. Professor Miles, of the chair of chemistry, died; Colonel Preston resigned as director of the experiment station and professor of agriculture; Mr. R. C. Price, of the Miller School, was elected to the chair of chemistry; Mr. A. F. Gully to that of agriculture, and Mr. W. E. Anderson as superintendent of shops. Mr. Gully declining his election, Professor D. O. Nourse, so kindly remembered by all who knew him, was elected in his stead. Lieutenant John A. Harmon, of the 7th U. S. Cavalry, was detailed as commandant of cadets. Those who were here during Colonel Harmon's time of service will remember him with love and admiration for his sterling qualities as a man and an officer. The first trips taken by the corps as a military body were under his charge, and at the naval rendezvous at Norfolk, and later, at the exercises of the unveiling of the monument to the soldiers and sailors, in Richmond in 1894, it was largely due to Colonel Harmon that the corps made the excellent reputation that their later trips have continually increased. In later life, Colonel Harmon was connected with the establishment of the Quito and Guayaquil Railroad in Ecuador, where he died.

Dr. W. B. Conway resigned as college surgeon in June, 1890, and Drs. Kent Black and W. F. Henderson, both former students, were appointed, officiating on alternate weeks.

In the spring of 1891 Professor Anderson was made professor of electricity and physics in addition to his superintendency of the shops, but in 1893 he resigned both positions.

From the founding of the college in 1872 up to 1891, we note the following material developments:

The Virginia Agricultural and Mechanical College began in 1872 with nothing but the inadequate Preston-Olin building and limited grounds; with a faculty of three or four members; with constant changes of administration, practically no support from the State and discouraging political interference; yet by 1891 there had been provided a barrack building for housing the students; two academic buildings of brick, with a few lecture rooms and a poorly equipped laboratory for chemistry, and a few offices; a building for the experiment station, used also for a horticultural building, with a small greenhouse attached; four houses for professors, with the old "Solitude" mansion refitted; a machine shop by the conversion of the old Preston-Olin building; a large frame structure for assemblies; and a smaller frame house used as a shop. The planning and laying out of the campus had been started, and an army officer had been secured as commandant and military instructor.

THE ADMINISTRATION OF PRESIDENT McBRYDE

The spring of 1891 saw another reorganization of the college, ushered in by the resignation of General Lomax as president. The board also declared vacant the chairs of English, biology, bookkeeping, and commercial law.

On May 7, 1891, the board unanimously elected as president and director of the experiment station, Dr. John M. McBryde, then president of the University of South Carolina, giving him a very free hand in selecting his own associates and formulating his own policies. During the interim, Professor J. E. Christian had acted as president and he was re-elected to the chair of mathematics.

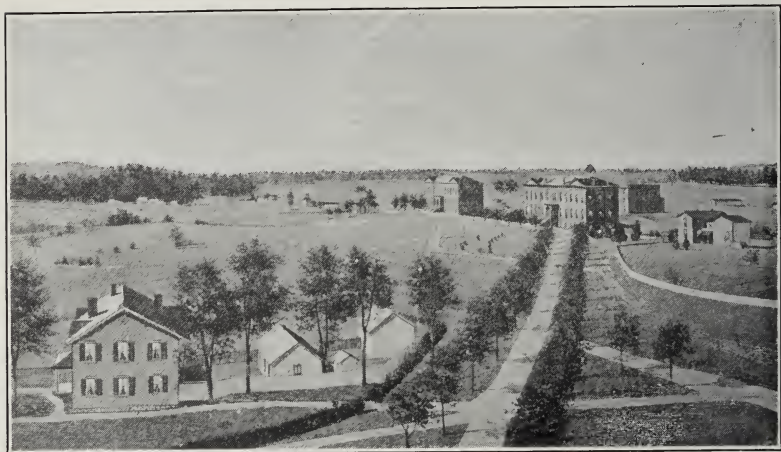
In accordance with Dr. McBryde's carefully considered plan of reorganization, the following departments were created: agricultural chemistry, President McBryde; mathematics and civil engineering, Professor Christian, Assistant Professor Harmon, Instructor Hurt; mechanical engineering, Professor Fitts; horticulture, entomology, and mycology, Professor Alwood; English, history and political economy, Dr. Sheib; biology, Professor Smyth; modern languages, Adjunct Professor Campbell; electrical engineering and physics, Adjunct Professor Anderson; general chemistry, geology and mineralogy, Adjunct Professor R. C. Price; analytical chemistry, Adjunct Professor Davidson; agriculture, Adjunct Professor Nourse, veterinary science, Adjunct Professor Niles; woodwork, Instructor Bray; iron work, Instructor W. N. Cunningham; bookkeeping, Mr. W. W. Hurt. Mr. Hurt was also appointed secretary of the faculty, Mr. A. W. Drinkard ('93), librarian, and Mr. G. W. Fleet, marshal.

Session of 1891-92. With the foregoing faculty, the session of 1891-92 opened. Seven courses of study were offered, of 4 years each, leading to the degree of Bachelor of Science, namely, agriculture; horticulture; applied chemistry; general science; civil, mechanical, and electrical engineering; and two shorter courses in practical mechanics and practical agriculture, in which certificates only were given. Post-graduate courses were offered leading to the degrees of M.S., C.E., M.E., and E.E.

The mess and kitchen for some time past and into the session of 1891-92 had been in the basement of Academic Building No. 1. The students, seated on stools, ate at long, bare tables. Napkins were unknown luxuries. Some of the bachelor professors, and one or two married professors with their wives, had a separate table in a corner of the same room, which occupied the whole of the western part of the basement. Whether they received better fare or not, many longing glances were cast by student eyes at this "table of privilege." Toward the end of this session the mess was moved to the old two-story wooden building still standing by the "pavilion" to the east of the northeast entrance to the old campus. As already stated, the original

brick building of the Preston-Olin Institute had been converted into the machine shop. The only barrack then was No. 1, with the tower, and several of the unmarried professors had rooms therein.

The class of 1892 was the first to adopt a senior uniform of dark blue trousers to match the elaborately braided senior blouse of blue, and the under-classes wore the uniform of dark blue blouse and gray trousers. The use of the gray coatee was discontinued by the authorities.



From a wood cut made from a drawing or photograph taken from the top of the shops about 1890-91. Compare this with the photograph made from the same place in 1897.

The Athletic Association was organized in September, 1891, with J. A. Massie as president, and after much discussion black and cadet-gray were adopted as the college colors, and the college yell was finally chosen to be:

“Rip Rah Ree! Va., Va., Vee!
Virginia, Virginia!
A. M. C!”

As the title of the college was at that time merely “The Virginia Agricultural and Mechanical College, “Virginia A.M.C.” was meant to represent that title. Some attempt was made to arouse an interest in football. Messrs. Massie, Stull, Pratt, Friend, and Lovenstein, and Professor Smyth, tried to arouse intelligent enthusiasm in the modern game. It was not, however, until the fall of 1892 that any team was chosen to represent the college, at which time, Professor Anderson also lent his influence and person to the team. St. Alban’s School, then a flourishing preparatory school under Colonel Miles, at Radford, was the only rival we attempted to win laurels from, and baseball was

also rather inchoate. Tennis received some attention, and a tennis association was formed. The history of athletics is too voluminous and important to be attempted here, and those interested are referred to "The Bugle" of 1903 for the facts up to the year of that volume.

During this session the corps decided to revive publication of "The Gray Jacket," dormant since 1889, and Mr. A. W. Drinkard was the first editor of this revival. The first trip of the corps as a military organization was taken on June 17, 1892. The corps, consisting of two companies of 30 men each, attended the decennial celebration of Roanoke City.



Prof. Alwood's home in 1891-92, now the Administration Building. To the right, where "faculty row" is now located was then a wheat field.

The Effinger house, adjoining the north corner of the campus, near where now stands the Science Hall, was purchased and used as an infirmary. Later, this house was torn down and the material used in part to build the house now occupied by Professor C. Lee. Painter's spring, near Colonel Palmer's property, to the northeast of the town, was purchased and the water conducted by gravity to a reservoir by the shops, whence it was pumped to a tank in the tower of barrack No. 1. Up to this date, water had been pumped by ram from the stream by the quarry. The land where "faculty row" now stands, down to the old orchard by the ice-pond, was a wheat field, later used as a brick-yard.

The catalogue for 1891-92 gives a total of 116 students, though there were only about 80 in attendance at Commencement. For these Commencement exercises a large tent was secured, as the college had no suitable hall. The tent was pitched on the level ground, now grown up in trees, southeast of the present infirmary, and a rain storm dur-

ing the Sunday exercises necessitated a liberal use of umbrellas among the audience.

Among new appointments were the following: Mr. T. L. Watson, now professor of geology at the University of Virginia, as instructor in geology, and Mr. C. G. Porcher in forge work.

Session of 1892-93. Among matters of interest during the first of this session was the organization of a cadet band of sixteen brass pieces under the leadership of Cadet Clifford Anderson. Like many young organizations it was very crude, the relative merits of the different performers being gauged by the amount of wind power they could put into a blast. No one now hearing our excellent band would realize what its early character was from a musical standpoint. The band now attracts men who are already performers; then, with hardly an exception, no man could read music or knew even how to blow his horn. As already mentioned, the first football team in the history of the college was put on the field this autumn, with Professor Anderson as captain.

The mess was moved to the large wooden building known as the "pavilion," still standing northeast of the present mess-hall, and was under the charge of Mrs. Crockett. A wooden building of nine rooms was built as a veterinary infirmary, near the horticultural building—now the offices of the extension division. This wooden building was later moved to the southeast of the stone agricultural building where it still stands. A one-story brick building was erected for forge and foundry work, and this still stands by the site of the old shops, east of the mess-hall. Two three-inch rifles were furnished to the college by the War Department, forming the nucleus of the subsequently organized battery.

Among student activities was the formation of the Thespian Club, which enlivened student life by giving rather creditable minstrel shows. The boys purchased wigs, and made various "properties." This organization continued in existence until about 1899, giving in the course of its life some very good entertainments of a much more ambitious character than mere minstrel shows. An effort was made to start also an orchestra. This was composed largely of decidedly amateur performers who played almost entirely by ear. It was called "The Lost Chord Band" and consisted of guitars, cornet, violin and clarinet. It did not live very long.

The corps of cadets, consisting of three companies and the band, attended the naval rendezvous at Norfolk in April, 1893. It was here that Captain Finch's picked company won the prize of two hundred and fifty dollars in a competitive drill against two competitors. The V. M. I. corps was scheduled to appear in the contest but it did not come on the field. By vote of the corps, this money was used by Colonel Harmon to purchase two 3-inch rifles, which, with the two already here, were later used by the battery. These two cannon now stand, and for some time past have stood, on guard in front of the esplanade of Barrack No. 1. A powder magazine was built below the hill, in front of Academic Building No. 1, to store the increased

amount of ammunition furnished by the War Department. This brick vault, now removed, used to be pointed out to credulous visitors as the mortuary vault of our dead presidents.

Commencement exercises were held in the old pavilion.

The following faculty changes were made: promotions, adjunct professor to professor, Messrs. Campbell, Price, Nourse, Davidson, and Niles; Colonel Harmon was made acting professor of mathematics; Professor Anderson, Mr. Cunningham, and Mr. Bray resigned, and Messrs. P. C. Hubbard and J. R. Parrott (a former student), both of Lynchburg, were appointed instructors in machine shop and wood shop respectively; Mr. J. P. Harvey, of Blacksburg, was given charge of the band.

The college sustained a loss through the death of Professor James Fitts, of the department of mechanical engineering, who was killed near Welch, West Virginia, in a railroad accident, while on his way to the Chicago exposition.

In August, 1893, Professor S. R. Pritchard was appointed to the chair of electrical engineering and physics; and in September of the same year Mr. L. S. Randolph, of Baltimore, was appointed to the chair of mechanical engineering.

A creamery and cheese factory was built out of the proceeds of farm crops, in the low ground between Professor Pritchard's present home and the stone agricultural building. This low ground, up to and including the present athletic field, was used by the horticultural department as vegetable gardens. The products from these gardens were sold to the professors, but later such products were used in the cannery (built near the creamery) and sold for home consumption.

The catalogue for 1892-93 gives an attendance of 177 students.

Session of 1893-94. The possession of four cannon made possible the formation of a battery, at the opening of this session, with cadet Captain A. Hull Apperson in charge. The old wooden shops building (now a store house) was equipped as a steam laundry under the charge of Mr. D. O. Matthews.

On October 18 the college was again called upon to sustain a loss in the faculty through the death of Professor J. E. Christian, who had been a member of the faculty since 1880.

The third trip of the corps as a military body occurred on May 29. The occasion was the unveiling, in Richmond, of the monument to the soldiers and sailors of the Confederacy. Three companies of infantry, and the band, composed the battalion, which remained in Richmond until June 2, encamped near the Lee monument. The cadets were an escort of honor to Governor O'Ferrall. On the return from the ceremonies a heavy downpour of rain dampened the ardor and uniforms of the boys; but the band, though drenched to the skin, struck up "the Washington Post" march and saved the day. Cadets of that day will remember the episode of the muddy white trousers.

In June, Dr. S. M. Barton was appointed adjunct professor of mathematics and civil engineering.

Attendance for the session, 236.

During the summer, the land to the right of the road leading to the horticultural and experiment station building (now the extension building) was leveled, and a boulevard was constructed from the old chestnut tree (still standing by the Y. M. C. A. building) to the horticultural building. Along this boulevard "faculty row" was later gradually built.

Session of 1894-95. A new dormitory (No. 2), a brick building of fifty-five rooms, was completed by October. A fourth infantry company was organized. This fall signaled our first entry into state athletics, and our first game with V. M. I., played in Staunton on November 28, result V. M. I., 10; V. A. M. C., 6.



The first foot-ball team, 1892, Prof. Anderson (with ball at right end), captain.

Up to this date there had been practically no athletic field, the games at home being played back of Barrack No. 1 or down about where the sewage disposal plant now is. President McBryde assigned to the athletic association for their use, and for a drill field, a portion of the horticultural gardens next to the grounds of Professor Campbell's house, later removed. This field was not leveled then, but had a gradual fall toward the southwest. However, it seemed level compared with what had been our only grounds. When, in later years, the field was leveled and put in its present good shape, and the hill toward Professor Campbell's house, where now stands the field house, cut down as it now is, it was a surprise to even those who had played and drilled there to see what a fall there really was to the land.

The Y. M. C. A. issued its first handbook, though then it had no building.

During the session, six professors' houses, of brick, were erected on "faculty row." The nearest of these to the barracks, built for Professor R. C. Price and later occupied by Professor Vawter, was torn down when the present stone shops were built.

On December 7, Judge Gardner died. He had been the treasurer for a long time, and his loss was deeply felt. Mr. C. I. Wade, of Christiansburg, was appointed in his place.

The equipment of the battery was, largely through the efforts of the corps, further increased by the purchase of forty sabres.

This was the winter of the big snow, when town and college alike suffered a coal famine. There were no stone roads then, and no railroad from Christiansburg, all communication being by horse power;



The first band, 1892-93, Mr. J. P. Harvey (in center front), leader.

the auto was a thing of the future. The whole community was out of touch with the world for a few days, as no vehicle could get to or from Christiansburg, and the deep cuts in the roads to the coal mines were drifted high with snow. Volunteers were called for, and students and townsmen turned out in a body and cleared a road to Brush Mountain and the coal mines through deep drifts, in places over ten feet in depth.

The new mess and Commencement hall, a large two-story brick building, was completed in the spring. The large addition to the north, containing now the private mess and the bakery, was, however, a later addition. The hall was finished in time for Commencement.

Adjunct Professor Pritchard was promoted to a full professorship, and Assistant W. W. Hurt to an assistant professorship; Mr. W. D. Saunders was made superintendent of the creamery and assistant

professor of dairy husbandry; Mr. W. G. Conner ('92), instructor in wood-work; Mr. J. M. Johnson, of the Miller School, instructor in forge and foundry; Mr. A. T. Eskridge ('94), instructor in geology; Mr. W. H. Rasche, of the Miller School, assistant in drawing; and Mr. L. W. Jerrell ('94), assistant in wood-work.

The first issue of "The Bugle," published thereafter annually by the senior class, appeared at this Commencement. It was a very modest volume compared with the sumptuous editions of later years, but the editors considered it as quite an achievement. The cost to the purchaser was only \$1.50.

Attendance this session, 325.

In the summer Mr. T. L. Watson resigned the instructorship in geology, and Dr. S. M. Barton the chair of mathematics and civil engineering. This latter chair was then divided, Colonel William Patton, of Lexington, was elected to the chair of civil engineering, and the commandant, Lieutenant D. C. Shanks (now Major-General Shanks) was appointed professor of mathematics.

Session of 1895-96. The mess was moved from the old pavilion to the new mess-hall, where it now is. The Legislature authorized the college to issue bonds to the amount of \$15,000 to erect a water tower, which was built under the direction of Colonel Patton and Professor Randolph, the board having purchased fifty acres from the Houston estate to secure the spring which is still the source of our water supply.

Another important event at this time was the act of the Legislature allowing the Virginia Agricultural and Mechanical College to be legally known as "The Virginia Agricultural and Mechanical College and Polytechnic Institute," whence comes our well known "V. P. I." The Legislature placed under the jurisdiction of the experiment station at Blacksburg the cattle quarantine and the enforcement of laws with regard to insects injurious to fruit culture. Professor W. B. Alwood was made state entomologist, and Dr. E. P. Niles was made state veterinarian.

The Christmas holidays were increased by two weeks and the spring session was lengthened to enable the corps to take part in the Confederate reunion at Richmond, in late June. Commencement was on June 19, and on June 24 the battalion, of four companies of infantry, one battery of light artillery, the band and staff officers, left for Richmond, where they arrived at 6 P. M. The cadets were escorted by one of the military companies to their camp near the Soldiers' Home. The students had invited as their guest on the trip our veteran chaplain, Rev. George Gray, and had presented him with a suitable chaplain's uniform. The old gentleman considered it a duty of honor to march by the side of the corps the whole distance from the depot to the camp at the Soldiers' Home, and his venerable and military appearance excited much interest along the line of march. The exhibition drills and parades drew large crowds, and the sham battle roused to such a pitch of excitement the old soldiers present that several of them tried to assume control of the artillery and direct the

boys when and how to work the guns. At the laying of the cornerstone for the Jefferson Davis monument, the band by request furnished music during the exercises. That afternoon Colonel Shanks dismissed the battalion, and the cadets returned to their homes.

During this session, dissatisfied with the black and gray colors which had been adopted, and which were unpleasantly suggestive when worn in stripes, the corps, with the help of Dr. Sheib and others investigated the matter of colors, taking note of those already adopted by the colleges of the country. Finding that orange and maroon made at that time an unique combination, not in use elsewhere, these were adopted as the official college colors, in the fall of 1896. They were first worn by an athletic team on October 20, 1896, in a game against Roanoke College. At this time also, the college yell of "Rip, Rah, Ree," etc., was abandoned, and after some competition and many suggestions the now familiar "Hokie, Hokie" cheer became the standard yell.

In the spring of 1896 Field-day exercises were held for the first time. There was no graded running track, scarcely any appliances for hurdles, jumping, etc., save what had been made and improvised by the boys themselves. None of the contestants had done any preliminary training at all, yet some good records were made, such as the running broad jump of over nineteen feet by Luther Johns. Ingles, too, made the hundred-yard dash in ten seconds. First place was won by Lewis Ingles, who was adjudged the best all-around athlete, with Johns as second.

Instructor Parrott was promoted to be assistant professor; and the following were promoted from assistants to instructors: A. W. Drinkard ('93); J. W. Stull ('93); F. D. Wilson ('94); L. W. Jerrell ('95); F. S. Roop ('97) was made instructor in veterinary science, and C. G. Guignard, assistant in machine work. Dr. Kent Black, one of the college physicians, resigned, leaving Dr. Henderson in sole charge.

Attendance, 335.

Session of 1896-97. Instructor F. D. Wilson resigned to study at Johns Hopkins, and Mr. W. B. Ellett was appointed to fill his place in the chemistry department.

An entertainment for the benefit of athletics, that will be remembered with amusement by the alumni of that day, was the presentation of "Mrs. Jarley's wax works," gotten up by Miss Susie McBryde. One of the features of this entertainment was our 240-pound football guard, "Jumbo" Pelter, over six feet tall, who was dressed to suit the character of "Little Nell."

During the spring, the new water-works system was completed; the tank, elevated 150 feet above the level of the athletic field, had a capacity of 50,000 gallons.

In June, Assistant Rasche was made instructor, and R. C. Stuart ('95) was made assistant in machine work.

Attendance, 336.

Session of 1897-98. By this time, through the untiring interest of Dr. Sheib, athletics had been placed on a fairly firm basis, and the need was evident for a college paper especially devoted to the interests of athletics, although the "Gray Jacket," a publication of more literary pretensions, had always had a department devoted to this branch of college life. Accordingly, "The Cohee" was established, largely through the efforts of Mr. S. H. Sheib, a nephew of Dr. Sheib. The first issue appeared on December 8, 1897, and the paper lived until June, 1898, when, through lack of financial support, it suspended. It was a bright, newsy sheet, covering points of general interest in college news, as well as athletics. About this time two other organizations were started, which did much to help in general



Barns, creamery, horticultural building, and Prof. Alwood's residence, 1894-95.

college life. A dramatic club, under the name of "Puffs and Queues," was developed through the influence of Dr. and Mrs. Sheib and the Misses Patton, aided by some of the best talent among the students. Some excellent selections were successfully attempted, some that had run well on the boards of large theaters, such as "Charley's aunt," "All on account of a sandwich," etc. The "Thespian Club" had not discontinued, but it was composed entirely of students. The need for a good orchestra called to the front a small group of music lovers, including some of the ladies of the faculty, and for three sessions these worked together, with some additions, developing an orchestra of no mean merit. The original members were: Miss Margaret Patton, piano; Mrs. W. D. Saunders, violin; Frank Carper, violin; Joe Brown, cornet; "Bill" Cox, bass horn; "Chess" Brown, double bass

fiddle; Professor Smyth, clarinet. Later, Mr. Jackson, violin, and H. C. Michie, clarinet, were added; and during the last year of the existence of the orchestra, Mrs. R. C. Price was pianist, and "Jack" Eoff, violinist. The bass violin purchased by this orchestra is still doing duty in the orchestra.

On May 17, 1898, field-day was again observed, though again without much preliminary training. Curtis Rorebeck easily won first place as best all-around athlete, and Cannon and Bean (now Dr. R. Bennett Bean, of the University of Virginia) tied for the second place.

This was the year of the Spanish-American war, and "The Cohee" for April, 1898, contains a copy of a communication to Governor Hoge Tyler from the corps, tendering their services in a body for the defense of their country, and petitioning that the Governor request the U. S. War Department, in the event of the acceptance of the offer of the corps, to detail Lieutenant Shanks as commandant of the corps. This petition is signed by

J. B. Danforth, Capt. Co. D.
J. A. Burruss, Capt. Battery E.
Benjamin Harrison, Capt. Co. B.
Edward Graham, Capt. Co. C.
J. S. A. Johnson, Capt. Co. A.

The corps, however, was not called on, and Colonel Shanks, who had been our commandant for four years, was ordered for duty elsewhere, eventually winning laurels as commandant of Iloilo in the Philippines. Many of the boys entered service in the army, and nearly the whole of the band were on duty in camp in Florida.

During this session a cannery was erected near the creamery. This preserved the products from the horticultural grounds for use in the mess and for sale also.

Rev. George T. Gray, our senior chaplain, died on October 29, and was buried with military honors.

Dr. A. T. Finch ('92) was appointed commandant of cadets and assistant professor of physiology and materia medica.

Dr. Roop resigning, Dr. Charles M. McCulloch was appointed assistant professor of veterinary science and state veterinarian. Assistant Professor Parrott was made adjunct professor, and Mr. C. D. Taliaferro was made secretary to the president. Mr. J. P. Harvey resigned as leader of the band, being on duty in Florida, and Mr. Frank Carper was appointed in his place.

Attendance this session, 333.

Session of 1898-99. In July Mr. D. O. Matthews was made marshal. In August Dr. E. E. Sheib and Professor Walker Hurt resigned. Dr. R. H. Hudnall was elected to the chair of English, and Mr. G. W. Walker was appointed assistant professor of mathematics, English and Latin. The department of electrical engineering and physics was divided and Mr. C. E. Vawter, a son of the rector of the board of vis-

itors, was appointed acting professor of mathematics and physics. Mr. A. W. Drinkard was made secretary of the faculty.

A refrigerating plant was erected in connection with the wooden creamery building. Up to this date the college was supplied with ice from the ice-pond, all the faculty subscribing to the expense of the underground ice-house, which was about opposite the house now occupied by Dr. Watson. Later, two ice-houses were built "under the spreading chestnut tree," still alive, near the Y. M. C. A. building. These were discontinued when the refrigerating plant was built.

Captain C. E. Vawter, who had been rector of the board since the reorganization of the college in 1890, and who had served the college for fourteen years, resigned, and Mr. J. Thompson Brown was appointed rector in his stead.

On June 20, 1899, was laid the corner-stone of the Y. M. C. A. building, a triumph to the devotion and energy of Mr. Lawrence Priddy, who had traveled north and south to secure the funds therefor. The building was constructed by Mr. Wesley Gray, of Blacksburg.

Attendance this session, 303.

Session of 1899-1900. The offices of the president, commandant, and treasurer were moved in September from Academic Building No. 1 to the rock house, occupied at one time as a residence by Professor Morton, and later by Professor Alwood. The latter moved to the house built for him in the old orchard, now the residence of Dr. Watson. On the night of February 14, 1900, the rock house was destroyed by fire, in spite of the efforts of the fire brigade. The wind was blowing a gale and the thermometer was about ten degrees above zero. Colonel Finch managed to break into his office on the ground floor and save his records. The contents of the college safe, including the class records, were subsequently found intact, though the safe had fallen through into the basement. The executive offices were then moved to the house formerly occupied by Professor Christian, and later always known as the commandant's house, which at this date was not in use, as Colonel Finch was living elsewhere.

A bond issue of \$100,000 was authorized by the Legislature for buildings and equipment. During the spring the outbuildings and fences of the old Christian house (now the commandant's house) were removed and the grounds thrown into the campus. On April 1, Dr. John Spencer, of Canada, was appointed to succeed Dr. McCulloch.

In May, the corps, under Colonel Finch, attended the carnival in Richmond, was quartered in the auditorium at the fair grounds and took part in the parade.

In June, Dr. Finch resigned, and Mr. J. S. A. Johnson ('98) was appointed assistant professor of mechanical engineering and military science, and commandant of cadets. Dr. F. D. Wilson ('94) was made instructor in chemistry. Instructors Conner and Rasche were promoted to the rank of assistant professor. Mr. Frank Carper resigned as director of the band and Mr. J. P. Harvey was reappointed. Mr. John Shultz was appointed mess steward.

A uniform department was created with Mr. T. J. Walsh, formerly first assistant cutter at West Point, as superintendent. The department was assigned the Starkey house, recently purchased, and later used as a residence for Dr. Barlow. Now, completely rebuilt, this house is occupied by Professor Stahl. The Camper property to the west of the mess hall was purchased, and a wooden house was erected for Mr. Shultz. This is now occupied by Mr. Owens.

Attendance, 343.

Session of 1900-1901. Professor Pritchard's house was finished in September and a new brick dormitory (No. 3) of four stories and sixty rooms was completed, thus finishing the south side of the front quadrangle.

A stone structure to the north of the dormitories, on the site of the baseball grounds of 1890-91, was completed during the fall for use as a heating-plant, and in April the electric light plant was moved from the machine shop and installed in this building. This furnished power for the campus and town lights, and steam heat for the dormitories, Science Hall and Y. M. C. A. building.

The corps, under Colonel Johnson, attended in June the Pan-American Exposition in Buffalo, being quartered in tents on the exposition grounds. The boys returned on June 9, before Commencement.

In June, Dr. F. D. Wilson and Mr. H. L. Price ('98) were promoted to assistant professorships, and Assistant Waddell was made an instructor. The following new appointments were made: A. P. Spencer, of Canada, instructor in animal husbandry; S. B. Andrews, machine work, and H. M. Faulkner, forge and foundry.

Attendance, 386.

The Willis property, west of the mess hall, was purchased and the house remodeled for a dwelling for Mr. D. O. Matthews. This is now the residence of Professor Gudheim.

Session of 1901-1902. The athletic and parade grounds, which in 1894 had been located on a part of the grounds to the southwest of Professor Campbell's house (which stood between the present library and the field house), were increased by a further grant of land from the horticultural tract, and the department of horticulture was given 25 acres across the stream west of the ice-pond. No attempt had as yet been made to grade and level the athletic field, which sloped gradually to the south, as may now be seen by the slope at the field house, and the bank at the south end of the field.

The new building erected as a science hall was sufficiently completed for occupation, and housed the departments of chemistry, geology, biology, and physics, with electrical engineering in the basement. The Y. M. C. A. building was opened in September, with Mr. H. J. McIntyre, of Salem, as general secretary. The First Academic building, vacated by the removal of the administrative offices and the chemical department, was assigned to civil and mechanical engineering and drawing, and contained also the armory. The Second Academic building, after the removal of the departments of biology, physics, and electrical engineering was assigned to English and modern languages

on the main floor and basement. The Lee and Maury Societies, and the library, as heretofore, still occupied the second floor, the lofty ceilings of which were then on a level with the eaves of the building.

On April 1, the corps of five infantry companies, the battery, band and drum-corps, left Christiansburg under the command of Colonel Johnson for the exposition in Charleston, S. C. The president, Dr. McBryde, and a number of the faculty and others accompanied the corps. On arrival in Charleston the corps was quartered on the exposition grounds. In spite of a cold, raw spell of weather, there were many enjoyable incidents, and the daily exhibition drills on the grounds were highly complimented and attracted crowds of spectators. Through the influence of Mayor Smyth, the corps was assigned an important position in the parade which escorted President Roosevelt through the city to the exposition grounds, where the President of the United States reviewed the troops. The many bands in the parade played various marches, mostly national, as they passed in review. As V. P. I. drew near the balcony in which the president stood, Mayor Smyth said to him, "Now here come my boys." At that moment, as though preconcerted, our band struck up "Dixie"—the only time it had been played on the march. The president's characteristic smile was all that could be seen of his face, as he waved enthusiastically to the corps, and the crowd went wild.

In the latter part of April President McBryde moved into the new house in the grove, still the president's house, and the outbuildings and fences around the old house were removed preparatory to converting this into the infirmary.

This being the tenth year of Dr. McBryde's administration, a movement was started, with Dr. F. D. Wilson as chairman, for a decennial celebration at Commencement. With the hearty approval and cooperation of alumni and former students sufficient funds were raised to purchase tablets to the memory of Professors Fitts and Christian, and to have painted a fine portrait of Dr. McBryde by Bransom. At Commencement, Dr. W. E. Dodd ('95), now of the University of Chicago, in behalf of the alumni, presented the portrait of Dr. McBryde; Judge W. M. Pierce ('84) presented the tablet commemorative of Professor Christian; and Rev. E. P. Miner ('93), the tablet in memory of Professor Fitts. This portrait and two tablets are now on the walls of the library. A duplicate of the portrait was presented to Dr. McBryde by the students and faculty.

In June Assistant Professor Spencer succeeded Dr. Niles, resigned, as professor of veterinary medicine; Adjunct Professor Parrott was made professor; Assistant Professor J. S. A. Johnson was promoted to be professor of military science and tactics and adjunct professor of mechanical engineering; and the following were promoted from assistant professor to adjunct professor: W. D. Saunders, G. W. Walker, F. D. Wilson ('94), and H. L. Price ('98), and Instructor A. W. Drinkard ('93) was made assistant professor. New appointments: Dr. Meade Ferguson ('96), assistant professor of agriculture; Dr. J. G. Ferneyhough ('98), assistant professor of veterinary science and

state veterinarian; W. M. Brodie ('01), assistant in mathematics and first assistant commandant; T. G. Wood ('01), second assistant commandant; J. F. Strauss ('94), assistant in drawing; C. P. Miles ('01), assistant in French and German; J. L. Phillips ('97), assistant state entomologist and pathologist; and C. D. Taliaferro, registrar.

During the session a system of sewerage, with sewage disposal plant was completed. This system is now no longer in use. The house and grounds now occupied by Professor Campbell had been the old Francisco place, and in the early '90s had been rented as an infirmary by the college. Subsequently it had been bought and enlarged by Mr. Hampton Hoge, and the handsome boxwood avenue in front of the house cut down. This house, with six acres of land, was now purchased by the college and assigned to Professor Campbell as a residence.

Attendance, 472.

Session of 1902-03. In September, Professor Campbell's old residence, formerly occupied by Dr. Martin P. Scott and later by Professor Fitts, was fitted up and assigned to the department of agriculture for lecture and laboratory rooms. The outbuildings and fences were removed and the grounds thrown into the campus. As before stated, this house was torn down when the building now used as a library was erected as the auditorium, and its material was used to construct a house for Dr. Hudnall, now occupied by Professor Burkhart. Professor Parrott's residence was also built on the recently purchased Gitt property, and Professor Lee's house, built largely of material from the old Effinger house (once used as an infirmary, in 1891), was erected, largely by Professor Lee himself. The college post-office and book-room was established in the marshal's office and an adjoining room in Barrack No. 1. Professor Alwood's new residence, in the old "Solitude" orchard, was completed in the fall. It was then the next house in faculty row, south of the house now occupied by Dr. Newman, and the next south of it was the old "Solitude" mansion, then occupied by Professor Nourse, and now by Professor Saunders. Dr. Watson now occupies the Alwood house.

In June, 1903, the new office of dean of the faculty was created, and Professor Smyth, who had for some time been performing the duties usually assigned to such an office, was made officially dean of the faculty, being the first occupant of the office. Dr. J. E. Williams was elected adjunct professor of mathematics and Mr. H. L. Wilson, of geology and mineralogy; Mr. J. B. McBryde, assistant professor of organic chemistry, and Dr. C. M. Newman, of English; the following instructors were appointed: G. L. Fentress, mathematics; J. R. C. Brown, Spanish and history; and P. H. Eley, English and Spanish; and J. H. Gibboney ('01), assistant in analytical chemistry and assistant chemist at the experiment station. Promotions were made as follows: assistant professor to adjunct professor, Messrs. Conner ('92), Rasche, Ferguson ('96); assistant to instructor, Messrs. Brodie, Wood, Miles, and Moncure, the latter all alumni.

Attendance this session, 627.

Session of 1903-04. In August, Miss M. G. Lacy was appointed librarian, and Major B. R. Selden, registrar, to succeed Mr. C. D. Taliaferro, who died in July. A brick building was completed with a lower floor for the laundry department and an upper floor for the tailor shop. This is the building now used entirely for the laundry department. The old Starkey cottage, used as a tailor shop, was assigned to the state entomologist, J. R. Phillips, for office and laboratories.



The beginning of "faculty row," 1895. Ice-house on left end, Prof. R. C. Price's house, later removed to make way for the shops building, on right.

This session saw the birth of "The Virginia Tech," the delayed successor to the short-lived "Cohee." "The Tech" was the official organ of the athletic association, and started with Professor J. B. McBryde as editor-in-chief, the associate editors being four faculty members and a representative from each of the classes. The first issue appeared on October 7, 1903. The bleachers were also erected on the athletic grounds through the activity of "The Tech" and presented to the association.

The old rock house, first a residence and then used as an administration building, which was destroyed by fire on February 14, 1900, was rebuilt and enlarged and reoccupied by the executive department in April, 1904. It contained the offices of the president, dean, commandant, registrar, and secretary, and the fireproof vault.

On April 19, President McBryde was unanimously elected president of the University of Virginia by its board of visitors, being the first president-elect of the University. Dr. McBryde, however, declined the honor, stating his reasons in full in a letter addressed to the board, extracts from which letter were published in the daily papers of the state. It will be of interest also to mention here that in 1893

President Grover Cleveland had offered to Dr. McBryde the secretaryship of agriculture, but he declined it, feeling that duty required him to remain at Blacksburg while matters here were still in a formative condition.

In May the corps left for the St. Louis exposition. It took two sections to carry the party of 554 people. The first section carried the six companies of infantry, and on the second were the band, battery, signal corps, drum and bugle corps, staff, postgraduates and former students. Although there was much rain during the stay at the exposition grounds, the general verdict was that it was the most successful trip ever taken by the corps. Of the large number of military organizations at the exposition from all parts of the country, the universal opinion was that our cadets ranked easily next to those from West Point. The corps returned on June 8, just before Commencement.



The original Thespian Club, 1894-95.

The following promotions were made in the faculty: adjunct professor to professor, Drs. Williams and Wilson and Professors Walker and H. L. Price; assistant professor to adjunct professor, Dr. Newman; assistant to instructors, J. H. Gibboney, H. L. Davidson, and L. O'Shaughnessy. Resignations: Messrs. H. L. Wilson, J. R. C. Brown, and P. H. Eley. Appointments: Dr. T. L. Watson, professor of geology; Mr. A. M. Soule, professor of animal husbandry; Mr. F. H. Abbott, assistant professor of English; Mr. J. R. Fain, assistant professor of agronomy; Mr. Hugh L. Worthington, instructor in modern languages; and Mr. P. O. Vanatter, instructor in agronomy.

Attendance this session, 727.

The college was now organized into four departments, each with its own faculty and dean: academic department, Professor T. P. Campbell, dean; scientific department, Professor R. J. Davidson, dean; engineering department, Colonel William M. Patton, dean; agricultural department, Professor A. M. Soule, dean. An executive council was formed, consisting of the president, Dean Smyth as dean of the faculty, Commandant J. S. A. Johnson, and the deans of the four departments. Professor Soule was appointed director of the experiment station, and Mr. W. B. Ellett ('94), assistant chemist at the station. On June 18, Professor R. C. Price resigned the chair of industrial chemistry and metallurgy.



The cadet battalion in 1895, Lt. Shanks (now Major-General Shanks) in command.

During the summer, the sloping hill between Barracks 3 and 5 was cut down and faced with a heavy stone wall, approached by a flight of stone steps. Later, it was found necessary to guard the parapet with the present heavy iron railing, to prevent accidents. Dr. Smyth's residence, between the Alwood house and the ice-pond, was completed and occupied in September.

Through the influence of Professor Randolph, the railroad which the Virginia Anthracite and Railway Company had constructed from Christiansburg to Merrimac Mines, was completed through to Blacksburg, and the arrival of the first passenger train on the morning of September 15, 1904, was a great event to town and college. Primitive as the road was then, and absurd as was the packing-box of a depot, the visitor of today has no idea of the tremendous boon it was. There were no autos in those days—at least not around Blacksburg—and even if there had been any, the road from Christiansburg had not been graded to even what it now is, and it was not metalled save imperfectly for a short distance. It was often actually impassable, even on

foot, during the winter and early spring months. Hack lines of archaic types connected Blacksburg with the outer world, and the fine macadam road of today was not existent even in dreams. As one looks back, it is a wonder how we managed. Now that the Norfolk and Western Railroad has built us the modern depot and given us a good service, one often smiles at the recollection of the old "Huckleberry," with its wheezy engine and its one composite coach and baggage car.

Session of 1904-05. The new auditorium being now under construction, the Commencement hall, over the mess, was turned over to the dining department to hold the large overflow of students, and the four-story brick annex completed in September came into immediate use. This contained, as now, the steward's office, the private mess, store-rooms, bakery, etc., and eleven rooms on the fourth floor were known as the "Y. M. C. A. annex," and were used as a dormitory. A large addition was made to the machine shops (the old Preston-Olin building, used as a dormitory in 1888). This addition made a quadrangle with a small court in the center, the old building being the northwest side of the square. Dormitory No. 5 was completed in January.

On February 1, the schedules were changed, starting at 8:20 in the morning and running to 12:20, each class period being for fifty minutes, and the laboratory hours were from 1:30 to 3:45 in the afternoon, with military drill from 3:45 to 4:30.

A large stock barn and two cottages were completed for the department of agriculture.

On the night of February 22, 1905, the science hall was totally destroyed by fire. The day having been a holiday, the building was not in use that day, and when after midnight the fire was discovered it was beyond control. Very little of the equipment was saved. The loss to the institution was about \$30,000, not including the severe loss individually to the professors in books, manuscripts, and private collections, which latter losses were of course never made good. It was due to the heroic efforts of the students, particularly of Cadet D. B. Hines, that the adjoining barrack building, and possibly the whole of that side of the quadrangle, were saved from burning. At the risk of his life Mr. Hines lay, head down and projecting over the steep sloping roof of Barrack No. 4, held by other students, and applied wet blankets and water to the scorching wood-work of the barrack's windows and eaves. In recognition of his gallantry, Mr. Hines was presented with a gold medal, and all his fees were remitted. Although some demoralization from the fire might have been excusable, immediate steps were taken to accommodate the departments now without a home; vacant rooms in barrack No. 4 were called into use as class and laboratory rooms, and with some doubling up classes were resumed in a couple of days.

The stone building designed for an auditorium (now the library) being completed in time, Commencement exercises were held therein. The wing of the building, now used for the tailor shop upstairs and

dwelling and library office rooms below, was fitted up with accommodations on the lower floor for the board of visitors on their official visits, and the large room upstairs was faculty meeting room. A new science hall was started on the foundations of the burnt building, to be similar to the first. The construction was in the hands of Mr. D. O. Matthews, who had built the first one and also the auditorium and other buildings put up while he was superintendent of grounds. The old farm barns, handed down, with additions, from the old days when "Solitude" was the Preston home, were torn down, and the foundations were laid for the present stone agricultural hall, intended originally for the departments of agriculture, horticulture, and veterinary medicine only; now overcrowded beyond its capacity with numerous other departments. At this same time, the early summer of 1906, the wooden experiment barn was started, on the experiment plats, where it now stands. A new brick residence was completed in June for Professor Soule. This is now occupied by Dr. Chrisman.

The courses of instruction had at this date expanded to nine, namely, agriculture, horticulture, applied chemistry, applied geology, preparatory medicine, general science, civil, mechanical, and electrical engineering, each of four years' duration, and leading to the B. S. degree.

The athletic association, organized by the corps in 1891, was, until 1901, under the control of student management. In 1901 a system of graduate management was inaugurated and proved very satisfactory. In 1903 a complete reorganization was effected, with Mr. J. H. Gibboney ('01) as graduate manager. The athletic council was composed of two members of the faculty committee, two student members (one a postgraduate and one a member of the senior class), the graduate manager, and the treasurer. Professor H. L. Price ('98) was elected permanent treasurer. Football games were arranged with the leading Northern colleges, such as West Point, Dartmouth, and Annapolis. It was under Mr. Gibboney's management that the team was developed which beat the West Point team 16 to 6 at West Point, and also the same season beat the University of Virginia 11 to 0 on Lambeth Field. This famous team was composed of the following men:

Harlan	fullback
Carpenter	right halfback
Treadwell	left halfback
Nutter	quarterback
Stiles	center
Stickling	right guard
Cunningham	left guard
Hynes	right tackle
Wilson	left tackle
Lewis (captain)	right end
Webber	left end

Hanvey, Cox, Harris, Hildebrand, Diffendall and Lawson were substitutes. Professor C. P. Miles coached the team, with Mr. Hunter Carpenter, who also played at right half.

On May 26, 1905, the college suffered a severe loss in the death of Colonel William M. Patton, professor of civil engineering and dean of the engineering department.

Attendance this session, 728.

Session of 1905-06. The new science hall was ready for occupancy during October of this fall. Externally similar, it had some internal improvements upon the old building.

The following changes occurred among the college officers: resignations: Secretary Jackson, Y. M. C. A.; Assistant Faulkner, in forge work; J. P. Harvey, musical director; and Miss Maud Needham, clerk to the executive council. Appointments: J. A. Armstrong, secretary, Y. M. C. A.; J. B. Teany, assistant, in forge work; H. D. McTier, musical director; Miss Louise Nielson, clerk to the executive council; and Miss Virginia Patton, clerk to the commandant. Colonel R. A. Marr was elected professor of civil engineering, and appointed dean of the engineering department.

A hazing episode at the opening of this term caused a profound stir through the prominence of those drawn into the matter, and resulted in an investigation by the Legislature. This was the famous Christian case. It came to a very sudden termination by the hasty withdrawal of the charges against the faculty by the prosecution, after the first meeting of the investigating committee.

On account of ill health Dr. McBryde was ordered to Jamaica by his physician, in the early winter, leaving the rector, Mr. J. Thompson Brown, as the official head of the institution, with Professors Campbell and Smyth jointly acting as president on the grounds.

Mr. Jarnigan was appointed instructor in animal husbandry. Messrs. H. L. Davidson and A. P. Spencer resigned as instructors in chemistry.

In March the Legislature appropriated funds for the completion of the agricultural hall and to pay the debt incurred in rebuilding the science hall.

The first meeting in the South of the student volunteer movement, held in Nashville, Tennessee, was attended by delegates from the V. P. I. For the second time in its history, Arbor Day was observed at V. P. I., Dr. Hudnall officiating. The first Field Day in three years was held on May 11. Professor Smyth was the official representative of V. P. I. at the ceremonies attending the installation of the president of the University of Alabama on the 75th anniversary of the founding of that institution.

Dr. McBryde returned from the tropics after Commencement, on June 18, and resumed his duties. Mr. Armstrong resigned as secretary of the Y. M. C. A., and Mr. A. S. Johnston was appointed. The following changes occurred in July: Professor Smyth resigned as dean of the faculty to devote his time to the duties of his department; Colonel J. S. A. Johnson resigned as commandant to confine himself to the engineering department; Captain G. H. Jamerson, of the 29th U. S. Infantry, was detailed by the War Department and appointed commandant; and Professor D. C. Nourse resigned as professor of

agronomy. Mr. J. J. Davis was promoted from assistant to instructor in French.

In July it was decided to allow the corps to attend the approaching Jamestown exposition, and to have the institution represented by a creditable exhibit.

One thousand members of the State Farmers' Institute, held in Roanoke, visited the college on July 10, coming from all parts of the state.

In August, Instructors J. M. Johnson, J. H. Gibboney, G. L. Fentress and L. O'Shaughnessy resigned. The appointment of Captain Jamerson as commandant was confirmed; C. M. Mast was appointed instructor in physics; J. R. Lewis, assistant in foundry; and H. D. McTier, assistant in wood work and band director. Dr. Newman was granted leave of absence on the first of May and spent four months recuperating and studying in Europe, returning late in August.

During the session, Professor Abbott developed a very creditable glee club which added much to the social life. The session of the college was changed for the next year from a semester to a trimester system.

Attendance this session, 619.

Session of 1906-07. Beginning with this session the control and editing of "The Tech" was placed entirely in the hands of student management.

The following appointments were made: H. Gudheim, instructor in graphics; T. G. Wood ('06), assistant in chemistry and third assistant commandant; W. G. Myers ('05), assistant in surveying and fourth assistant commandant. Miss Hannas, with Miss Garrison assisting, were appointed nurses in charge of the infirmary.

In October, 1906, Dr. McBryde submitted his resignation as president, and it was accepted to take effect at the close of the session.

A new eight-ton refrigerating plant and cold storage room was ordered built as part of the wooden creamery building. Arrangements were made for exhibits at the Jamestown exposition. A concrete cellar was completed east of the agricultural hall for fermentation experiments.

This session saw the birth of the "Agricultural Journal," published by the agricultural students, and which lived for two years.

Early in January the new agricultural hall was completed and arrangements made for removing the creamery from the old wooden building to the basement of this new hall, where the creamery is now situated. The greenhouses and heating-plant to the rear were also finished. The old veterinary building which stood by what is now Dr. Williams's residence, was removed to its present site.

In January, the board conferred upon Dr. McBryde the honorary degree of Doctor of Science and elected him president emeritus with all the privileges of a professor of the institute. Dr. McBryde was also placed on the Carnegie Foundation.

Professor R. J. Davidson was elected consulting chemist at the experiment station, and Harper Dean was appointed assistant state entomologist.

The old building, used in turn as a residence by Professors Scott, Fitts, and Campbell, and later as an agricultural hall, was ordered torn down. The wooden creamery was fitted up as a dormitory for the students working on the farm. Some time later, after its disuse, this building was a victim to incendiarism.

The corps decided to abolish the use of monogram caps.

Dr. T. L. Watson resigned as geologist to accept the chair of geology in the University of Virginia, and Dr. Holden, assistant professor of geology, continued in charge of that department. Professor A. M. Soule resigned in April as director of the station, and accepted a position in Georgia.

Colonel Marr erected in front of the academic buildings the concrete pillar upon which are placed the exact points of the compass and the elevation of the campus above sea-level.

On May 30, Dr. Paul B. Barringer, of the University of Virginia, was unanimously elected president by the board.

Finals closed on June 2, on account of the Jamestown exposition, which was attended by the corps.

Attendance this session, 577.

When Dr. McBryde took charge in June, 1891, the new administration found on hand to begin with: two brick academic buildings; one brick dormitory; the old Preston-Olin building, converted into a poorly-equipped shop building; two old wooden buildings (one, a small one, used as a shop, the other semi-ruinous); and five professors' houses—eleven buildings in all. There were practically no shops or laboratories; no water works, sewerage, public hall, infirmary, laundry, or adequate lighting system. The small campus of about ten acres in front of the buildings was used as a hay meadow and there were scarcely any walks or driveways.

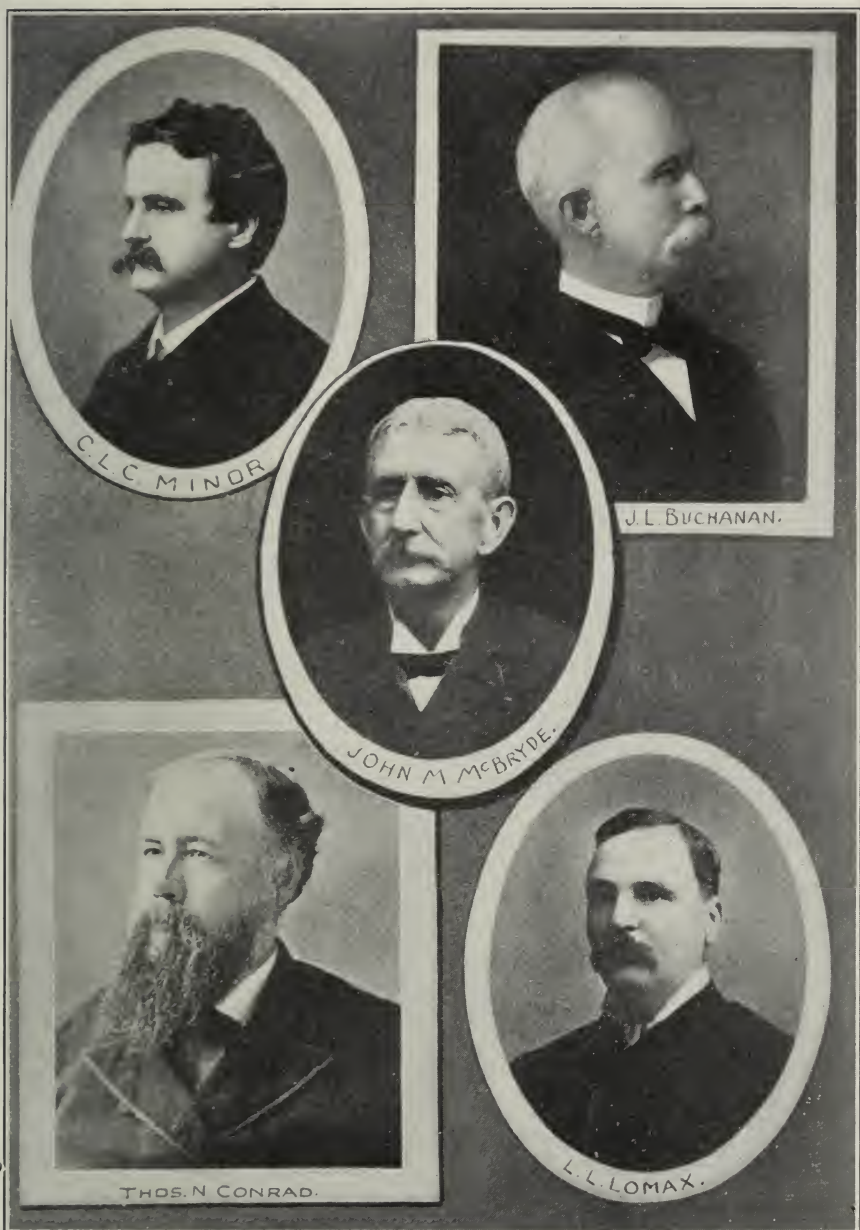
Not a dollar of income was allowed by the State, not even for insurance or repairs, the scanty income being wholly derived from the Federal grant. During Dr. McBryde's sixteen years of administration special appropriations were secured from the State amounting to \$332,750, in addition to the annual sums allowed for insurance, repairs and maintenance.

To show for this sum, eight separate purchases of land, between sixty and seventy acres in all, were made, 27 industrial plants and other similar improvements were established, 6 old buildings were renovated, 67 new buildings (25 brick, 4 stone, 5 iron, 33 wooden) were erected, 26 laboratories, 25 lecture-rooms, 18 offices, 9 halls, etc., fitted up and equipped—186 improvements in all—the campus was extended to about 75 acres, 2,000 ornamental trees were set out, and several miles of cinder walks, avenues and drives were made. Many small buildings and improvements are not herein included. In addition, a handsome stone Y. M. C. A. building was erected and furnished, largely through the efforts of the faculty and students. The attend-

ance for the first session, 1891-92, was only 135; this gradually increased, reaching the maximum in 1904-05 of 728, more than the equipment of the college could handle successfully. The first graduating class, of 1892, numbered four men; in the closing years of Dr. McBryde's administration the graduating class averaged upwards of 80, and in the last year the teachers numbered 56 and other officers 21. The Virginia Agricultural and Mechanical College had become the Virginia Polytechnic Institute.



The team that first won from V. M. I., at Lynchburg, score 6-4. The colors were then black and gray. 1895.



The Presidents of the first thirty-five years.

THE ADMINISTRATION OF PRESIDENT BARRINGER

In July, 1907, changes in the faculty took place as follows: Resignations: Professor Fain and Instructors Moncure, Vanatter, Robeson and Jarnigan; promotions: from assistant professor to professor, Messrs. Saunders, Conner, Rasche, McBryde, J. S. A. Johnson, Newman, Barlow, and Ferguson; from assistant professor to adjunct professor, Messrs. Holden and Abbott; from instructor to associate professor, Mr. Worthington; from instructor to assistant professor, Messrs. Lee ('96), Brodie ('01), T. G. Wood ('01), and Miles ('01). Appointments: H. S. Peyton, farm manager; T. B. Hutcheson ('06), instructor in agronomy; E. B. Fred ('07), instructor in mycology; J. M. Johnson, instructor in foundry. In August, Miss Ethel Lacy was made assistant librarian, Dr. W. J. Quick was elected professor of agriculture and dean of the agricultural department; and A. B. Spencer ('05) was made associate professor of animal husbandry.

Session of 1907-08. Faculty changes: resignations: Professor Campbell as dean of the academic department, to confine his attentions to the department of modern languages; T. G. Wood, as assistant professor of biology and assistant commandant; Dr. Meade Ferguson, to become state bacteriologist at Richmond; and E. B. Fred, instructor in mycology to accept the position of assistant bacteriologist at the experiment station. Dr. Barlow was made dean of the graduate department, and Dr. S. W. Fletcher was elected director of the experiment station. Professor Saunders accepted the position of state food and dairy commissioner, retaining, however, his position as director of the V. P. I. creamery. Dr. Quick resigned as dean of the agricultural department and Professor H. L. Price was appointed in his place. Dr. Fletcher assumed his duties in January. W. K. Brainerd was appointed professor of dairying, and Lyman Carrier, of agronomy. J. B. Fogleman was appointed stenographer to Dr. Fletcher, and Robert C. Ellett assistant to the treasurer and secretary of the faculty, succeeding Courtney Williams, resigned. Dr. Howard C. Reed was elected professor of plant pathology and pathologist at the experiment station, and Professor O. C. Burkhart was elected to the new chair of mining engineering. Dr. A. W. Drinkard was made assistant horticulturist at the experiment station.

During the year Professor Randolph designed a "lift bridge" for the "Huckleberry" crossing at Merrimac, over the Virginian Railroad. The bridge was designed in twenty-four hours and erected in seven days.

A branch library was established in the agricultural hall, and a concrete walk was built from Barrack No. 1 to the dining hall, passing in front of Academic Building No. 1, and replacing the old cinder walk. The department of biology moved from science hall to the agricultural building, its former rooms in science hall being added to those

of the physics department. A model dairy barn and four smaller buildings for individual animals were erected back of the experiment barn and plats for experiments in curative treatment of bovine tuberculosis.

The first basketball team of the V. P. I. was formed, largely through the activity of Cadet Hargrove.

Governor Swanson honored the college with his presence at Commencement.

Attendance this session, 546.



Faculty row in center, horticultural building at left and main buildings at right, 1896.

Session of 1908-09. This session saw many changes. A school for apprentices was established along agricultural lines, with Professor G. W. Walker as head-master. Entrance requirements to the college were raised in English and mathematics. Spanish was substituted for Latin, of co-ordinate value with French and German, and the modern language course was made a three-year course in one language. Mining engineering was established. The schedule was changed to four morning fifty-minute periods for recitations and one hour for military, with a three-hour practical laboratory period in the afternoon. The three lower years were designed for general academic and fundamental preparation, and the senior year was devoted exclusively to intensive specialistic work. The graduate department with Dr. Barlow as dean was made one of the five regular college departments. The executive council was abolished, its duties being assumed by the president, commandant, secretary of the faculty, and the different faculty committees, of which latter there were not a few. The battery organization was abolished, and the two muzzle-loading cannon belonging to the War Department of the United States were turned in, and two new breech-loading guns were received in their place.

Mr. J. Thompson Brown's term of office on the board having expired, he was not reappointed by the Governor, and Mr. J. C. Carington was elected rector of the board of visitors.

Mr. H. S. Stahl ('07) was appointed instructor in biology.

A graduate manager of athletics was elected to hold office as long as he was satisfactory to the corps. Also an athletic director, to devote his entire time to the development of athletics. Mr. Miles was elected graduate manager, and Mr. R. M. Brown, of Dartmouth, director.

A concrete esplanade, sixteen feet wide, was made, connecting the barracks buildings together and joining to the concrete way from Barrack No. 1 to the mess, and a mining engineering building was erected to the west of science hall and south of the power-plant. Cold-storage rooms were added to the mess hall.

The student-body was developed into a corps organization, the honor system was officially adopted by it, and student officers were elected. A constitution and by-laws were also adopted. At a later meeting, the corps voted to abolish hazing at V. P. I. after January, 1909. On January 22, V. P. I. played her first intercollegiate basketball game, in Blacksburg, with Emory and Henry college, winning by a score of 33-26. The game was played in the new stone auditorium.

In March, 1909, Mr. Branch Bocock was elected athletic coach, and in April it was decided to level and improve the athletic field and renovate the grand stand. The forgotten name of "Sheib Field" was superceded by that of "Miles Field" for the improved grounds, in honor of Mr. C. P. Miles.

The apprentice course was made a one-year course, designed for young farmers. The board appropriated money for hydrants on each floor of the barracks buildings. During the year the ground in front of Barrack No. 1 was leveled and terraced, and two mounted cannon were placed on the terrace. Six arc-lights were installed about the campus, and two concrete bridges were built over the stream in front of the agricultural hall.

Attendance this session, 565.

Session of 1909-10. Changes in the uniform of the corps included the disuse of khaki, and the adoption of the gray "coatee," the latter used for full dress.

Dr. Hudnall, who had been seriously ill, returned to his duties. Captain W. R. Dashiell, 24th U. S. Infantry, was detailed as commandant in place of Captain Jamerson; and Dr. N. S. Mayo succeeded Dr. Spencer, resigned, as professor of veterinary medicine. Mr. Midgett was made instructor in modern languages, and Mr. Reidlich, of Stuttgart, Germany, took charge as instructor in graphics. C. B. Walker ('08) was appointed assistant in chemistry and in the military department.

Illness again forced Dr. Hudnall to lay aside his duties, which were performed in his absence by the department of rhetoric. Dean Price and Dr. Ellett attended the meeting of the Association of American Colleges and Experiment Stations, in Portland, Oregon.

The publication of "The Gray Jacket" was discontinued.

J. L. Phillips resigned as state entomologist, and Miss Mary Lacy as librarian. James M. Teany, in charge of forge and foundry work, died on February 15, and professor George W. Walker died at the home of his daughter near Asheville, North Carolina, on March 17. The following resignations occurred: Professor Worthington, modern language department; Professor Abbott, English; and H. E. Allen, animal husbandry. Messrs. J. J. Davis, in modern languages, and Gudheim, in graphics, were made associate professors.

V. P. I. won the Southern Championship in football, winning every game played.

The two academic buildings were each provided with a steam-heating system, and entrances were made on their western sides, with concrete steps, for easier access to and from the barracks. A new reservoir was built for the water supply at the big spring; shower-baths were installed in the basement of Barrack No. 2, and a new laboratory for the engineering department was arranged in the basement of Academic Building No. 1.

Attendance this session, 509.

Session of 1910-11. The board of visitors elected as rector, Mr. L. E. Johnson, president of the Norfolk and Western Railroad, who had been appointed a member of the board.

The school of agricultural apprentices was changed from a preparatory course for the freshman year to a purely one-year course for farmers.

The following appointments were made: Dr. E. A. Back, state entomologist and entomologist at the experiment station; H. M. Arnold, associate professor of rhetoric; E. W. Lawson, associate professor of animal husbandry; and as instructors: Messrs. Smithey, modern languages; McCown, rhetoric; Robeson, mathematics and experimental engineering; Coleman, electrical engineering, and Angel, physics. Miss Ethel Lacy was appointed librarian. Professor Midyette resigned from the modern language department; Colonel Brodie, as assistant commandant; McTier, as musical director, and C. B. Walker, in physics. Cadet M. C. Smith acted as band-master for the session. Mr. A. W. Drinkard, Jr., was granted a two-years' leave of absence to pursue advanced work in horticulture at Cornell, looking toward his doctorate, and Mr. G. C. Starcher was appointed to serve during his absence.

A cement walk was laid, connecting the Y. M. C. A. with the stone steps between Barracks 3 and 5.

The first number of "The Skirmisher" appeared, being the old "Gray Jacket" in another form and under a new name.

On November 23, the corps, en route for Norfolk, stopped over in Richmond and the battalion was reviewed by President Taft. In the afternoon, the corps escorted the president to the auditorium. In December, V. P. I. sent a delegation of students to the International Stock Show in Chicago, being the only Southern college represented. On January 31, 1911, 700 representative farmers, in attendance at the

state institute in Roanoke, visited V. P. I. They were escorted over the grounds and were addressed by President Barringer and Governor Mann.

The farmers' short course was held from January 16 to February 11.

Mr. Bocock resigned as athletic director to accept a position at the University of North Carolina, and Mr. L. W. Reiss was chosen in his place. The basketball championship was won by the Tech team of 1911.

The tailor-shop was moved from its old quarters over the laundry to the room over the board rooms in the wing of the auditorium, where it now is.

After a lapse of several years, the Lee and Maury Societies were revived, and interest was developed in their exercises. Mr. O. R. McGill succeeded Mr. Wear as secretary of the Y. M. C. A. and was a most successful and popular secretary, doing excellent work.

Stoops were built in front of Barracks 4 and 5 and concrete walks were laid connecting them with science hall and the academic buildings.

Lieutenant J. F. Ware ('02), of the 16th U. S. Infantry, an "All South" end in his football days, was appointed commandant, succeeding Major Dashiell.

Attendance this session, 471.

Session of 1911-12. Improvements in the course of electrical engineering were put into effect this session. There were also offered degree courses in chemical and agricultural engineering, and a department was established in forestry, irrigation, and drainage, the course therein leading to a degree; and the entrance requirements to the freshman class were raised to fourteen units.

Appointments: C. B. Walker and G. B. Bright, assistant commandants; C. B. Walker and J. B. Lucas, assistants in chemistry; D. P. Clemmer, instructor in graphics; Ashe Lockart, assistant in animal husbandry; Messrs. MacKan and Chilton, assistants in physics; and Mr. J. P. Harvey was again made leader of the band and clerk to the superintendent of buildings and grounds. The following resigned: Instructors Mallory, Moorefield, Angell, Reidlich, Ayre and Coleman; and Miss Neilson, executive clerk.

In February, Mr. John H. Shultz resigned as mess steward after fourteen years of satisfactory service, and Mr. Julius Shultz finished out the session as acting steward until the election of Mr. Bierne Ellison in June, when Mr. Julius Shultz took charge of the college book store.

On February 21, the Maury Society won the loving-cup recently presented by Professor A. W. Drinkard, which was to be contended for in debate each year on the same date by the Maury and Lee Societies.

In June, Colonel Brodie sailed for Scotland, and Dr. Mayo for Panama, on a holiday excursion. Dr. Back resigned as entomologist in July, to take up work for the Government in Hawaii. Mr. Branch Bocock was elected to return next session as athletic coach.

A new road was graded from the alumni gate to the First Academic Building, the hill by the infirmary being cut down to a better grade. The town and college rejoiced at the erection of a new and modern railroad depot, to replace the old shack that had served up to this time. The town also put in a water and sewerage system, being part of the college system.

Attendance this session, 463.

At the July meeting of the board, Dr. Barringer tendered his resignation as president. This was accepted, but he consented to serve until July, 1913.



Athletic field in 1896, showing a field day event. There was no track and the ground was very rough. At the right is shown the residence then occupied by Prof. Campbell, later removed for the Library Building.

Session of 1912-13. Dr. Reed and Mr. F. L. Robeson were granted a year's leave of absence for further study. Resignations: Dr. Frank Wilson, professor of chemistry; Colonel R. A. Marr, professor of civil engineering and dean of the engineering department; F. S. Holmes, assistant commandant and instructor in horticulture; J. S. Cooley, plant pathologist.

By action of the board of control of the experiment station, the director had been allowed to grant leaves of absence for further study to promising young men on the station staff. Dr. Drinkard had already availed himself of this privilege, and had returned to V. P. I. after gaining his doctorate at Cornell. Mr. E. B. Fred was granted this leave and spent two years in Germany, returning with improved ability and enthusiasm to his work in soil bacteriology. Now Mr. T. B. Hutcheson was given a leave for further study. In this way, the station aimed to build up a strong research staff. In Mr. Hutcheson's

absence, Mr. A. N. Hodgson was appointed assistant agronomist, and Mr. C. H. Crabill in plant pathology.

The Southern Railway established a scholarship amounting to \$250 each year for four years, the beneficiary being required to promise that for at least three years after the end of his scholarship he would farm in territory contiguous to a line of the Southern Railroad system, or to teach agriculture, or work on an experiment farm in some state traversed by lines of the Southern system. Mr. T. P. Hill was the first beneficiary selected from among thirty-five applicants.

Following Colonel Marr's resignation, Professor O. C. Burkhart was temporarily put in charge of civil engineering.



The first field team, 1896.

In November, a special course was held for dairymen.

Mr. H. N. Faulkner, assistant in mechanic arts, died in December.

In January, two wireless stations were installed on the campus, on top of science hall and agricultural hall. The county demonstrators, forty-eight in number, spent six weeks at V. P. I. during January and February, taking a course in practical farming, and also the usual four-weeks farmers' winter course with the 30 other men enrolled in that course.

On February 1 the debt of \$2,500 against the Y. M. C. A. was paid. Mr. C. P. Miles acted as coach for the baseball team this spring. A new dance club, "The Cotillion," was organized among the students. This spring saw the demise of "The Skirmisher" which had fought, against odds, to be the successor of the defunct "Gray Jacket."

The college again sustained a most serious loss by fire in the early hours of Saturday morning, June 14, during the Commencement festivities, by the burning of the machine shop. The machinery, tools, etc., and the building itself were destroyed. During the summer arrangements were made to use the old pavilion as a shop until further provision could be made. The infirmary was renovated, the sick wards modernized, and a modern heating system installed in the excavated basement.

At this time Mr. L. E. Johnson retired from the board of visitors, and Mr. J. Thompson Brown was again elected rector, he having been reappointed to the board by the Governor.

At the July meeting of the board, Mr. R. B. H. Begg ('99) was elected to the chair of civil engineering; Dr. W. G. Chrisman ('01) to that of animal husbandry and veterinary science, and Dr. J. W. Watson to that of inorganic chemistry. Resignations: Dr. N. S. Mayo, professor of animal husbandry and veterinary science; Ashe Lockart, instructor in animal husbandry; T. B. Hutcheson, agronomy; also Instructors R. H. Chilton and Chapplelear, and Assistants MacKan, Taylor, McCabe, and C. H. Chilton.

Attendance this session, 471.

On July 1, Mr. Joseph D. Eggleston, for some time a member of the board as state superintendent of public instruction, entered upon his duties as president of the V. P. I.

In review of Dr. Barringer's services to V. P. I., it may be noted that when he took office in 1907 the entrance requirements were four units, and they were gradually raised during his term of service, until in 1912 they were fourteen units for the session of 1914-15. Agriculture was emphasized by the strengthening of the teaching staff, the addition of a professor of mycology, a degree course in agricultural engineering, and a department of forestry, irrigation and drainage; the farmers' winter course, established in 1907, was maintained and strengthened; and the school of agricultural apprentices was established and developed into a two-year practical course in agriculture. Numerous improvements were made which promoted and increased the comfort and conveniences of the students and improved their sanitary environment. The source of the college water supply was safeguarded by appropriate masonry. The danger of a typhoid epidemic in Blacksburg was reduced by extending to the town the college water and sewerage lines. Water was supplied to the barracks buildings; concrete walks replaced the old cinder paths on routes most used by the students. When Dr. Barringer became president, the Legislature appropriated \$30,000 to cover a deficit then existing, and from that time to the close of Dr. Barringer's administration, the institute was maintained free from debt, except the bond issues of 1896 and 1900.

THE ADMINISTRATION OF PRESIDENT EGGLESTON

Session of 1913-14. The Ed. Black property of some 60 acres to the south and east of the college, was acquired for college use. This property, although it has not been paid for, has greatly increased in value. New shop machinery was bought and installed in temporary quarters, the old pavilion being used as the main building.

Appointments: T. P. Campbell, dean of the faculty; L. S. Randolph, dean of the engineering department; W. K. Brainerd, professor of dairy and animal husbandry; F. L. Robeson, associate professor of physics; E. R. Hodgson, associate professor of agronomy; L. W. Summers, associate professor of animal husbandry (resigned December, 1913, and R. E. Hunt elected in his place); W. J. Schoene, state entomologist; and the following assistants: W. J. Barbour, forge work; F. T. Wall, geology; H. H. Bates, experimental engineering and assistant commandant; E. H. Knox, physics; J. M. Trimble, physics; J. B. Lucas, physics and chemistry. Promotions from instructor to associate professor: G. B. Bright, civil engineering; C. W. Holdaway, dairying. Dr. Reed returned from Europe, after a year's leave.

Two new county experiment stations were established, one at Martinsville and one at Charlotte Court House, the state department of agriculture having appropriated \$7,500 for these and for the station at Staunton.

The first agricultural fair held at Blacksburg was in October of this year and was well attended. The defunct "Gray Jacket," later "The Skirmisher," was resuscitated under the name of "The Firing Line;" and the Monogram Club was formed, consisting of all students winning their letters in any form of athletics. During this session, two-thirds of the enrolled students were members of the Y. M. C. A., with Mr. R. W. Owens as secretary. The Maury Society won the loving-cup in annual debate from the Lee Society. The world's record in butter production was broken by a Holstein cow of the V. P. I. dairy herd. The farmers' winter course was attended by about double the number of the previous year. At a meeting of the corps in March, it was decided to build the long needed athletic house on the athletic field, and work thereon was begun immediately.

In April, Dr. S. W. Fletcher handed in his resignation as director of the experiment station, to take effect July 1, 1914.

The new Alumni Gate was dedicated on June 16. The gate was presented as the gift of the alumni by Mr. Allen Eskridge ('94) and President Eggleston received it on behalf of the college. During finals also, the corner-stone was laid for the new stone shops building, to be known as "The McBryde Building." Appropriate masonic ceremonies were observed. During the summer, the stone building, which had been erected as a chapel and auditorium, and which had also been used for the basketball games, was fitted up as the library, which was now moved from its old place in the Second Academic Building.

Among other provisions of the Legislature money was provided for a septic tank, to replace the obsolete one hitherto in use. An important event was the transfer by the Legislature of the demonstration work in Virginia to the control of the V. P. I., thus making Blacksburg the center for the direction of county agents, with control of the funds for carrying on the work. Sixty of the demonstrators spent three weeks in January at the college, taking the special course in agriculture. This was made a permanent feature of the demonstration work.

Attendance this session, 527.

Session of 1914-15. Lieutenant S. W. Anding was detailed by the War Department as commandant, succeeding Lieutenant Ware; and Professor W. J. Schoene was appointed acting director of the experiment station. Mr. J. P. Harvey, musical director, being incapacitated by sickness, Mr. H. H. Hill took charge of the band this session and served for eighteen months. Other appointments were: A. S. Jewett, instructor in rhetoric; D. S. Lancaster, modern languages; V. E. Ayres, mathematics and assistant commandant; T. K. Wolfe, agronomy and assistant commandant; E. A. Livesay, third assistant commandant; L. B. Bransford and A. B. Carrington, physics; F. T. Wall and H. L. Jennings, chemistry; C. W. MacKan, civil engineering; G. S. Ralston, horticulture at the experiment station; John R. Hutcheson, livestock specialist with the demonstration work; C. H. Hays, specialist in hog cholera, with the demonstration work; W. D. Saunders, professor of animal and dairy husbandry and farm superintendent; and T. B. Hutcheson, professor of agronomy. H. S. Stahl was promoted from assistant professor to associate professor of biology. Resignations: Lyman Carrier, agronomy; W. K. Brainerd, animal husbandry; A. S. McGown, instructor in rhetoric, and L. P. Smithers, modern languages.

A Science Club was organized to stimulate interest in the various scientific fields, and to increase a sympathetic and broadening interest in the various lines of scientific work. Dr. Barlow was the first president of the club, which met twice a month. The board of trade of Blacksburg, which had been recently formed through the activities of Dr. Fletcher and Professor Carrier, elected President Eggleston as its chairman for the ensuing year.

The Christmas holidays saw the completion of the new field house, which was formally opened on January 27, 1915, and officially turned over to the athletic association with appropriate ceremonies.

During the latter part of January, Mr. Robert T. Ellett resigned as assistant treasurer and registrar, to take charge of the Ellett Drug Company, and Mr. Branch Bocock was appointed acting registrar.

The American Institute of Electrical Engineers authorized the formation of a student branch at the V. P. I. In March, President Eggleston was elected by the Legislature a member of the state board of education, but soon after resigned.

A women's auxiliary of the Y. M. C. A. was formed, and this did much toward improving conditions in the building. The steadily in-

creasing football squad made it necessary to employ two coaches, one for the line, and one for the back field. Again, the basketball team made a clean record, winning every game played during the season.

During the summer, Messrs. Bruce Williams and C. H. Crabill resigned from the department of bacteriology, and Mr. J. T. Murray, of New York, was given direct charge of the bacteriological work of the experiment station, with Mr. Karl Quantz, an alumnus, as assistant plant pathologist. Mr. Harris resigned as assistant chemist at



From the tower of the old shops building, 1897.

the station to accept a position in the Argentine, and Mr. J. T. Grisson was appointed in his place. At the July meeting of the board authority was given to re-establish the general science course, which had been abolished in Dr. Barringer's regime; and Dr. Newman was appointed dean of the academic department. Dr. Howard S. Reed resigned in August to become plant pathologist at the citrus experiment station at Riverside, California, and Dr. F. D. Fromme succeeded him.

Attendance this session, 490.

Session of 1915-16. Professor J. J. Davis was granted a leave of absence to take graduate work at Johns Hopkins. Mr. T. P. Campbell, Jr., a V. P. I. alumnus of 1909, was appointed registrar.

The freshman class this session was the largest in seven years.

Mr. R. E. Denny was appointed general secretary of the Y. M. C. A. The following appointments were made: instructors: M. C. Harrison, rhetoric; E. S. Cardozo and H. P. Sanborn, modern languages; assistants: P. A. Pearsall, chemistry; I. Udy, experimental engi-

neering; F. A. Heacock, graphics; H. E. Thomas, plant pathology; A. Chinn, civil engineering; A. A. Ingham, horticulture; and Milton Cutherrell, assistant to the treasurer and college book store keeper. P. V. Janutolo was promoted to be an instructor in chemistry; Bransford, in physics; Lancaster, in animal husbandry, and Wolfe, in agronomy.

The college sustained a great loss in the sudden death of Professor R. J. Davidson on the morning of Sunday, December 19, 1915. Professor Davidson had been connected with the college as professor of chemistry since July, 1891, having completed nearly a quarter of a century of service. Professor W. B. Ellett was appointed to carry on the work in agricultural chemistry.

In the November bulletin of the college was published a partial list giving the names of forty-four V. P. I. men then in service on the Mexican border, showing the aid given by alumni in defense of their country.

Mr. B. Ellison resigned as mess steward to accept a position as manager of the Blue Ridge Springs.

Through the energy of the registrar, Mr. T. P. Campbell, Jr., an efficient employment bureau was established under his care, to place V. P. I. men in more advantageous positions and to secure good positions for those desiring such.

At the April meeting, the board elected Dr. A. W. Drinkard as director of the experiment station, thus relieving Professor Schoene, who had been acting director for the past two years in addition to his duties as state entomologist. Mr. Jesse M. Jones was appointed director of the demonstration and extension work. Mr. H. H. Hill was obliged to give up the leadership of the band, and was succeeded by Mr. P. U. Janutolo.

During the spring the senior class built a concrete walk from the academic buildings to the library, the students themselves doing the work, with material furnished by the college. The rooms formerly used by the board, and later as a residence by Dr. Fletcher and family, in the wing of the library, were fitted up as living-rooms and office for the librarian.

On Sunday, June 11, Dr. R. H. Hudnall, after a long illness, died at his home on the campus. As a result of this, the department of English and rhetoric were consolidated, with Dr. C. M. Newman as head.

Governor Mann delivered the graduating address to the class of 1916, his subject being "Preparedness." Four hundred attended the final exercises, and at the alumni meeting a committee was appointed to consider the question of the erection of an alumni club house on the campus.

The General Assembly, having placed all the demonstration and extension work in agriculture and home economics in Virginia under the control of the V. P. I., Miss Ella G. Agnew, chief of the women demonstration agents in Virginia and director of the girls' canning clubs, was, on July 1, transferred from Burkeville to Blacksburg.

On July 3, more than eighty V. P. I. students reported for duty at the R. O. T. C. at Camp Lee, Virginia. Lieutenant S. W. Anding, commandant, was promoted to a captaincy in the army.

A notable feature of the Y. M. C. A. work during the session was a social service bureau, through which forty-seven or more students conducted an active campaign of religious work in the country districts and nearby mountains.

Mr. J. T. Grissom resigned in August as assistant station chemist.

During the session, Professor Vawter and the senior engineers installed an aerial and receiving wireless station, by which the weather reports and Arlington time were received.

Attendance this session, 505.

Session of 1916-17. During September the board refused permission for the establishment of fraternities or secret organizations at V. P. I. It also approved a course in applied physics, which had been recommended by the faculty. At the opening of the session, there were six county experiment stations conducted by V. P. I., and three by the college and the State Board of Agriculture jointly. For the first time in history, the college and town enjoyed the benefit of a Western Union Telegraph station, with office on the campus, in the field house.

Appointments: as instructors: W. E. Bowers, agronomy; C. L. Estill and T. C. Johnson, English; J. B. Lucas, chemistry; E. R. McKesson, mathematics and assistant commandant; C. R. Moore and P. H. Trout, physics; as assistants: W. B. Ellis, experimental engineering; T. J. Wells, electrical engineering; E. B. Burwell, geology, and C. B. Whitney, chemistry. The following instructors resigned: A. S. Jewett, V. E. Ayre, L. B. Bransford, E. S. Cardozo, and P. U. Janutolo. Mr. W. C. Stiles was promoted to an instructorship in animal husbandry, and H. E. Thomas, plant pathology and bacteriology. Professor Robeson was granted a leave of absence to study at the University of Missouri. Professor Davis returned to his work after a year at Johns Hopkins. Mr. Quantz was transferred from the department of pathology to that of horticulture. In December, Professor Smyth was appointed dean of the department of applied sciences, succeeding Professor Davidson. Mr. Quantz, Professor Starcher and Dr. Smulyan resigned.

On January 5, 1917, a unit of the R. O. T. C. was established. Juniors and seniors were allowed the privilege of taking this, but sophomores and freshmen were required to take the work. Men from the two higher classes entering the training corps were paid \$9.00 per month and all classes had uniforms issued them for drills when training. Captain C. C. Carson and Sergeant Fisher were detailed to assist Captain S. W. Anding in the R. O. T. C. duties. It was a period of unusual activity in the military department. A large number of applicants, largely from the ranks of the alumni, presented themselves to Captain Anding for examination for commissions. To assist in the increasing importance of matters military, the War Department detailed in March Sergeant Bresnahan, who was considered the best

drill sergeant in the army. On March 28, Captain Anding's term having expired, he was ordered for duty to Arizona, Captain Carson succeeding him as commandant.

In January, Dr. Barlow moved into his new house, and the old horticultural building which had been fitted for a residence for him, was turned over to the extension division as headquarters. Mr. C. G. Burr, state agent for boys' club work, established his headquarters at Blacksburg.

On March 3, the corps went to Washington to take part in the inaugural ceremonies of President Wilson. The appearance of the cadets and their bearing in the parade won for them most favorable comment from the highest sources.

Mr. Bowers offered a course in agricultural journalism during the third term, the first ever given here.

The calls for service abroad in the World War becoming more and more urgent, responses began to draw upon the personnel of faculty and corps alike. Early in May Professor Begg received his commission as captain of engineers and left for Fort Myer. From the corps, 64 men left for the officers' training camp at Fort Myer.

In spite of strenuous military training, athletics were not neglected, and on May 12 the Virginia Athletic Association held its meeting on Miles field, and V. P. I. won first place in the events.

The war call was being answered now so freely by the corps, especially by members of the senior class, that it was considered advisable to bring the session to an early close, and so on May 31 the session came to an end, the usual Commencement events being omitted, including the big alumni reunion which had been expected.

Attendance this session, 533.

During the summer school Captain H. E. Keller ('17) continued the valuable work of military training to all men on the grounds.

Mr. A. A. Ingham, assistant horticulturist, died suddenly in his room on June 13. E. R. Hodgson resigned to become specialist in agronomy with the extension division. G. S. Ralston, of the extension division, was appointed field horticulturist. During the summer Major Carson sailed for active field duty in France.

On August 3, C. B. Lambert ('14), on service in the aviation camp, while flying with an English instructor near Wheeling, West Virginia, fell to his death. He was the first V. P. I. boy to give his life for his country in the home field.

The State Farmers' Institute was held here on August 15.

The new shops building, constructed under the supervision of Mr. D. O. Matthews, and dedicated to Dr. McBryde, was first used for work in August. The simple but impressive modified Gothic front, with its sixty-foot tower, guards the main entrance to the shop, which extends 231 feet in depth and 210 feet in width. The several shop departments are separated by curtains of brick work, each department having its offices and supply rooms.

It is difficult to condense the facts which now brought V. P. I. to the front and vindicated her right to existence as a valuable asset in

time of need to the State and Nation. The following items will briefly speak for themselves.

Out of 99 men entering the first Fort Myer camp, 94 received their commissions. Each of the 26 men entering the regular army school at Fort Leavenworth was commissioned. Of two entries at the first Plattsburg camp, one man received a majority and the other a captaincy; and the five men at the first Oglethorpe camp received their commissions.

Extracts from the August, 1917, Bulletin:

"V. P. I.'s military men are distinguished as follows: Fort Myer training camp, 120; Virginia National Guards, 21; Regular Army, 55; Engineers Reserve Corps, 6; Aviation Corps, 4; Signal Corps, 2; U. S. Marine Corps, 4; Ambulance Corps, 2; Navy, 7; Mosquito Fleet, 3; Fort Oglethorpe training camp, 8; Fort Ben Harrison camp, 3; other U. S. training camps, 16; National Guards of other States, 2; Coast Guard, 6. (This list is incomplete, but lists 259 men at this date in service.)"

Session of 1917-18. In spite of the war conditions, or possibly on account thereof, this session opened with 199 freshmen. The personnel of the upper classes was changed, owing to the number absent on military duty, yet many new men entered the upper classes, so that the total number of students was not materially reduced. The registration, of course, showed the effect of the war call. The hitherto popular courses of agriculture, and electrical and mechanical engineering showed a loss, while civil and chemical engineering showed a marked increase. It was notable also that the number in the R. O. T. C. course had greatly increased, and students excused from military voluntarily took up military training.

From the Roanoke Times, September 20, 1917:

"Lectures on food production and conservation are to be given at teachers' institutes throughout the State this fall, thanks to the public spirited and far-sighted extension division of the V. P. I. * * * * The V. P. I. is making notable contributions to the country's cause in many ways, but the above plan promises to take a foremost place in the list of services rendered the Nation by the Blacksburg institute during the war. The people of Virginia should be very grateful to V. P. I. for what it is doing for them as well as for America."

Throughout the fall of 1916 and the summer of 1917, under the auspices of the American Red Cross, members of the faculty attended meetings at every precinct in Montgomery county, making addresses in behalf of war work, and forming chapters of the Red Cross. Dr. McBryde, as chairman of the Blacksburg chapter, was indefatigable in his interest in the work, and the ladies of the town and faculty alike were untiring in their devotion to the cause.

Mr. John H. Shultz, our mess steward, met with a tragic death on August 27, 1917. Mr. J. J. Owens succeeded him.

Appointments this session included: Major W. P. Stone, of the U. S. army, retired, commandant; E. R. McKesson, instructor in civil engineering; E. W. Diggs, graphics; V. L. Vaughn, physics and math-

ematics; S. A. Wingard, assistant in plant pathology; S. C. Harmon, assistant agronomist; W. G. Harris, associate chemist, experiment station; F. S. Glassett, assistant agronomist. Resignations: Professors C. E. Vawter, P. H. Trout, H. E. Thomas, and C. B. Whitney. Promotions: F. L. Robeson to the chair of physics and head of this department; C. P. Miles and J. J. Davis to full professorships in modern languages; W. M. Brodie to a full professorship in mathematics; M. C. Harrison to an associate professorship in English; T. K. Wolfe and D. S. Lancaster to associate professorships in agronomy and animal husbandry, respectively. The following members of the faculty were absent on military duty: R. B. H. Begg, G. B. Bright, H. P. Sanborn, W. C. Stiles, C. B. Moore, C. L. Estill, W. E. Bowers, S. E. Dietrick, G. G. Coleman, E. B. Burwell, A. P. Moore, and W. R. Ellis.



Blacksburg in 1897, from the shops building.

One hundred per cent of V. P. I. men entering the Engineer Reserve camps received commissions.

During the fall, this college was put on the United Press wire, insuring the transmission of athletic scores to all papers using the service.

During the winter the following changes occurred: O. C. Cox, veterinary department, and T. J. Murray, bacteriologist, resigned; Mr. A. B. Massey succeeded Mr. Murray.

On February 21, Dr. J. E. Williams was elected a member of the State Board of Education. In March a bill to allow V. P. I. to issue bonds to the amount of \$400,000 passed the House, but was defeated in the Senate.

In April, the college was made a member of the American University Union, which had its headquarters in Paris.

During May, C. P. Miles resigned as graduate manager of athletics, and C. A. Bernier was appointed athletic director.

Colonel George H. Jamerson, an alumnus and former commandant, was appointed Brigadier General.

Extracts from V. P. I. Bulletin of May, 1918:

"V. P. I. has at present 2,790 of its alumni under arms, more than Yale, Harvard, Princeton, or any other institution of like standing, North or South; and a prominent editor of Washington says, 'Incidentally, it gives the Federal Government evidence that the money it has invested at Blacksburg was wisely used and will be repaid many times over.'"

L. S. Randolph, professor of mechanical engineering and dean of the engineering department, handed in his resignation to take effect September 1, 1918, thus completing a quarter of a century of service here. At this time, he was the fourth in seniority of appointment of the living members of the faculty.

Professor Louis O'Shaughnessy was elected in June, 1918, to the chair of civil engineering, to enter upon his duties at the beginning of the next session.

Owing to war conditions, finals were shortened to two days, May 26 and 27. On the morning of the 27th Hon. R. Holman Willis presented a service flag to the college on behalf of the alumni association. The rector, J. Thompson Brown, received the flag for the college; and Miss Alice Hoge pulled the cord which unfurled the flag with its 740 stars. Before the end of the war the flag contained 1,700 stars, not a few of them being gold stars.

Attendance this session, 519.

In March, the college offered to take a certain number of enlisted men for instruction in the useful arts. Accepting this offer, the Government sent on May 31 a detachment of 220 men. These men were quartered in Barracks Nos. 3 and 5. They were under the command of Major John C. Skuse, assisted by Lieutenants Stanrod, Bell, and Taylor. Later, a surgeon, a dental officer, and a quartermaster were detached to service here. The officers of the college in charge were Dean Campbell, as director; Professor Parrott, bench work and carpentry; Professor Conner, machine work; Professor J. M. Johnson, forge and foundry; Professor Robeson, radio work; Professor McKesson and Mr. D. O. Matthews, concrete work. Aiding in this work, from outside of the college, were Messrs. Nickle, of Pennsylvania, in radio work, Barker, of Richmond, and Wilson, of Roanoke, assisting in mechanics. Professor Drinkard gave a series of lectures on war issues. The first detachment left on July 27.

On August 1 a second detachment of 225 soldiers arrived, all recruited from the District of Columbia. Forty-three additional men arrived a few days later, and twenty-eight men had been held over from the first detachment for further instruction. These, with the officers in charge, made a total of 302 soldiers at this time. During the

stay of these two detachments everything possible for their comfort and happiness was done by the town and campus people and by the ministers and the local Red Cross.

On June 3, seventy-four V. P. I. men reported at the training camp at Plattsburg, New York, remaining during the full period to July 3. When the second camp opened on July 22, about twenty V. P. I. men attended until its close on September 16.

A department for training teachers of vocational agriculture was established in June.

It is not possible in a short summary such as this to go fully into the magnificent war record made by students and alumni. Mr. H. H. Hill, the secretary of the alumni association, has carefully prepared the full record and it will doubtless be issued later in printed form. But we cannot pass on without calling attention to the fact that it was a Tech man who led into action the first Americans who took part in the actual fighting in France. Major J. W. C. Stevens, of the class of 1916, at that time a captain in the 26th U. S. Infantry of the regular army, led his company in the first engagement of American troops, near Soissons. And who can forget that among V. P. I. immortals stands high the name of Captain Lloyd Williams ('07), of the U. S. Marine Corps, who was the first Tech man to lay down his life on the battle field. When his command, newly arrived at the front, where desperate fighting was going on, received from the French commanding officer the order to retreat, Captain Williams's famous reply was, "Retreat? Hell, No! we've just come!" Surely, the spirit underlying these words should ever be a stimulus to every man facing a difficult situation, and will ever be remembered as embodying the true V. P. I. principle of "Do, or die."

Session of 1918-19. During the preceding summer, for the benefit of the regular army encampment, the Y. M. C. A. had established a most elaborate service. A red triangle banner was displayed in front of the building, and Dr. Newman was appointed camp secretary of the post. The National War Work Council sent athletic goods, games, writing materials, etc., and in addition to superintending all these details, Dr. Newman arranged a weekly program of song meetings, motion pictures, Bible classes, and other features. A canteen was established and liberally patronized. This work was continued by the National War Council when the Student Army Training Camp was established. This was practically a continuation of the work done for the army detachment. As his teaching work now interfered with the superintendence of this Y. M. C. A. activity, Dr. Newman was appointed supervising secretary, with Mr. P. N. Deering as associate, assisted by Mr. Miller and Mr. Drewry. In November, Mr. Deering was elected general secretary of the Y. M. C. A.

On account of the summer training detachment, the opening of college was postponed to October 1, but all new students were required to report on September 1, for special military training. The S. A. T. C. was formed on October 1, but the fatal epidemic of influenza rendered it inadvisable to assemble the students in class-rooms while it

lasted. The whole of October was given over to out-door military exercises for those physically fit. The college was saddened by a number of deaths from influenza, which occurred among the members of the corps.

The following U. S. Army officers were detailed for duty with the S. A. T. C.: Major J. C. Skuse, of the U. S. Infantry, as commanding officer, assisted by twelve lieutenants and two captains, including a post surgeon, dental surgeon, unit supply officer and quarter-master, all of the regular army.



Mess Hall and Shops, 1898.

Preparatory courses were offered in accordance with the Government regulations in the army service branches of the engineer corps, signal corps, chemical warfare service, quarter-master service, ordnance service, medical corps, navy, infantry, artillery, machine gunnery, transport and tank service. A naval unit of fifty students was established.

First Armistice Day, November 11, was duly celebrated, and the corps paraded through the town and back to Miles Field, where a review was held.

The educational instructor of the Government pronounced the S. A. T. C. at V. P. I. to be far above the average in the quality of work done, and the nature and extent of courses offered. The signing of the armistice was the signal for the demobilization of the S. A. T. C., which took place between December 5 and 12.

After much discussion, the faculty decided to start anew the regular session on the morning of December 31, and to continue it for six months with no holidays, to be divided into three terms of two months each.

Major Skuse was detailed as commandant, with Captain J. P. Gammon as assistant. In February the R. O. T. C. was reorganized and most of the cadets became members.

Professor Pritchard was appointed dean of the engineering department; Associate Professor Lancaster was made professor and head of the department of agricultural education; W. T. Ellis, professor of power engineering and machine design; A. B. Massey, associate professor of plant pathology and bacteriology; A. G. Smith, instructor in horticulture; F. L. Bruce, W. E. Pritchard and J. Duff, instructors in English; F. S. Glassett, instructor in agronomy; J. I. Smith, graphics,



The original "Huckleberry" Depot at Blacksburg.

and several additional assistants were appointed. Promotions: Associate Professor Hunt to professor of animal husbandry; H. S. Stahl, to professor of biology; instructor McKesson to associate professor of civil engineering. Instructors Estill, Vaughn, Harmon, and Diggs resigned.

Ensign M. C. Harrison returned from the navy on January 1, and also Mr. W. G. Harris, who had been absent for a year on military service. Professor Lee returned from the ordnance department in February.

The farmers' short course was not given this winter on account of the danger from the epidemic of influenza, which was again raging throughout the State.

At a meeting of the corps, it was decided to wear the blue and gray cadet uniform next year as a dress uniform, and the olive drab, issued to all members of the R. O. T. C., for work and drill. Sergeant Bresnahan, after a two-years' absence, returned early in April; and Lieutenant Ketchum, of the U. S. engineer corps, was assigned.

The Commencement of 1919 was held in July. Instead of the familiar blue and gray, the corps was clad in khaki for the drills. Many military heroes were present among visiting alumni. An incident of great interest, not merely because it was unique, was the presence of a president, an ex-president, and a next president of V. P. I. During the latter part of the session, President Eggleston had announced his intention to resign, to take effect on July 1, as he had accepted the presidency of Hampden-Sidney College. The board had, therefore, on June 12, at its Richmond meeting, elected Julian A. Burruss, of the class of 1898, to succeed President Eggleston. The final exercises were honored by the presence of Dr. McBryde, President Eggleston, and President Burruss, a fact which excited much pleasant comment.

Attendance of regular students this session, not including the special army detachments in short courses, 477.

On July 1, as part of the exercises, the monument erected by the class of 1919 and dedicated to "Our Dead Heroes in France," was unveiled by Mrs. A. B. Moore. The Hon. George Bryan, of Richmond, made the address on the occasion. This monument contains the names of the dead, and no V. P. I. man passes thereby without saluting.

Governor Davis was present at the finals, and made an address to the graduating class. During the exercises, President Eggleston was presented with a gold watch by Cadet C. E. Whitmore on behalf of the corps; and Dean Campbell presented the retiring president a silver service on behalf of the faculty and others of the college.

Director Jesse M. Jones having resigned, Mr. John R. Hutcheson, assistant director of the extension division for two years, was elected director, at the June meeting of the board.

On July 1, President Eggleston relinquished the presidency after having served for six years.

When President Eggleston took charge of the affairs of the college conditions were somewhat disturbed. Misunderstandings and outside interference had developed a state of unrest and suspicion not conducive to the best working together of all of the forces of the college. With infinite tact and grace of manner, a sympathetic attitude toward all, and a delicacy in holding the reins of government, Mr. Eggleston soon caused unrest to disappear among faculty and alumni; and perhaps the greatest praise that can be given his administration is to say that when he resigned, to the great regret of his faculty and against their earnest protest, he had developed a condition of harmony and confidence that spoke better than words of his character as a leader and a gentleman.

Among material improvements during this administration may be mentioned the new shops building known as the "McBryde Building of Mechanic Arts;" the new field house; ten new residences for college employees; the acquisition of the Black property; the lease, with privilege of buying, of the Houston farm of 176 acres; additional concrete

walks along the most-used thoroughfares; the moving of the library from its cramped quarters in the Second Academic Building to the stone chapel; and a number of other material improvements.

Additional and increased appropriations from the State were secured largely through his influence, and the meagre salaries of the faculty were increased—the first increase in twenty years. The office of dean of the faculty was restored; the two-year course in agriculture was systematized; and the department of agricultural education was created and provision made for the erection of a building therefor.

The war training camps at the V. P. I., and the consequent development of military training, also the record made by V. P. I. men, culminated in the publishing by the War Department in June, 1919, of the name of the Virginia Polytechnic Institute as one of the twelve "Distinguished Colleges" in the United States.



Breaking the ground for the Alumni Gateway.

V. P. I. MEN IN THE WORLD WAR

Not less than forty-two per cent of the entire alumni membership of V. P. I. was enrolled in the Nation's service, and the following statistics will indicate how they served:

Percentage of engineers entering engineers' camps, and of men entering Leavenworth regular army school, and Camps Oglethorpe, Benjamin Harrison, Grant, Gordon, Sevier, Taylor, and Plattsburg, who received commissions -----		100
Percentage of successful candidates for all camps -----		98
Brigadier General ----- 2	Naval Aviation Officers ----- 13	
Colonel ----- 1	Officers in Navy ----- 39	
Lieutenant Colonel ----- 7	Student Aviators ----- 36	
Major ----- 33	Military Instructors ----- 13	
Captain ----- 125	Non-Com. Officers ----- 68	
First Lieutenant ----- 163	Privates ----- 409	
Second Lieutenant ----- 246	Men in Navy ----- 42	
In Training Detachments -----		534
In S. A. T. C. and special war courses -----		444
Left in training camps at time of armistice -----		117
Killed in France -----		10
Wounded in battle -----		28
Died in camps -----		18
Captured in battle (one escaped) -----		5
Decorated for bravery -----		8
Cited for bravery -----		9
Enemy air planes brought down -----		6

The only Congressional Medal of Honor awarded to a Virginian was awarded to a V. P. I. student. In addition to this highest honor, V. P. I. men received six or more Distinguished Service Crosses, seven or more Croix de Guerre, two or more Legion of Honor, and numerous other foreign decorations.



P. B. Barringer,
President, 1907-1913.



J. D. Eggleston,
President, 1913-1919.



Julian A. Burruss,
President, 1919-1922.

THE PRESENT

This brings the history to President Burruss' administration, which has opened with so much promise of greater things. It is worthy of note that the session of 1921-22 sees a board with four alumni among its members, an alumnus as president, and a faculty, about one-half of whose members are alumni who have proved themselves in other fields and have been called back to serve their alma mater. With board, president, and faculty animated by a spirit to advance V. P. I. in every field of legitimate endeavor, we can look hopefully to the future increasing value and usefulness of the college to the people of Virginia and to the Nation.

SUPPLEMENT

The historical summary prepared by Professor Smyth reaches only to the beginning of the present administration. Believing that the alumni and other friends of the institution wish to know something of the accomplishments of the three years now closing, it is considered not inappropriate to add the statements which follow.

The entire organization of the institution has been revised as shown in the accompanying chart.

Closer co-operation among the various divisions of the institution, particularly the main divisions of resident instruction, extension, and research in agriculture has been secured; and closer and more sympathetic relationship with other agricultural agencies in Virginia has been established. A mutually helpful affiliation has been arranged between the Virginia Truck Experiment Station and the college, particularly for research and extension work; and an arrangement with the Blacksburg high school for teacher-training purposes has been operated successfully for two years.

The agricultural experiment station has added to its equipment and resources and has begun a period of expansion.

The extension division has added to its staff and to its projects, and it has been brought into close correlation with the experiment station and the division of resident instruction.

The summer school has been reorganized and enlarged, and it is being put upon a sound basis, so that next year it will be in every sense an integral part of the college session. Summer activities in connection with the boys and girls clubs, the farmers institute, etc., under the direction of the extension division, have been greatly expanded.

Net additions to the regular resident faculty of the college number twenty-seven members, plus nineteen additional instructors and assistants.

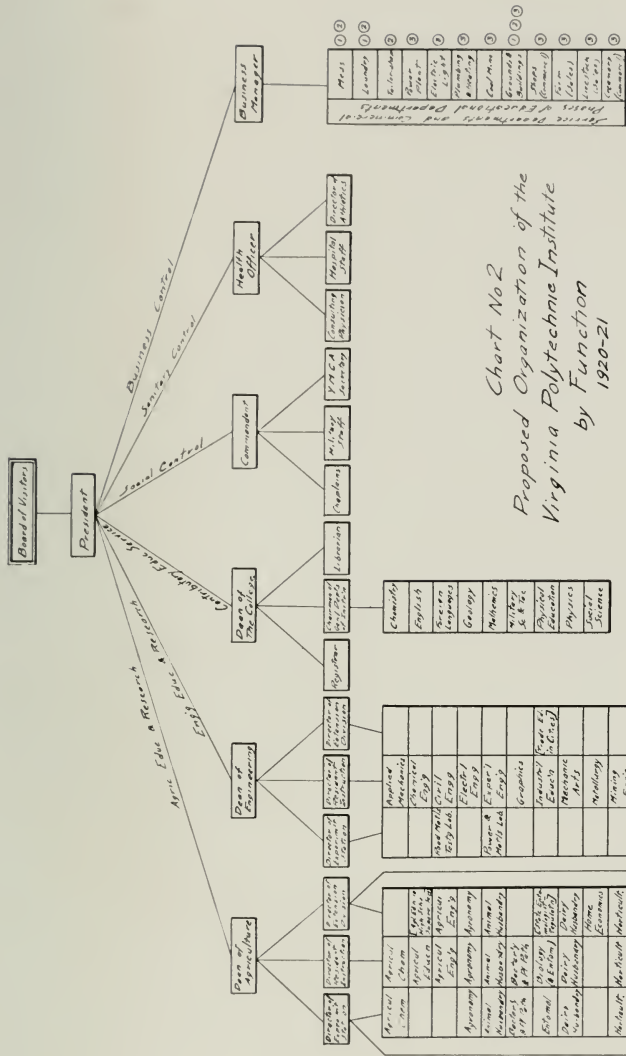


Chart No 2
Proposed Organization of the
Virginia Polytechnic Institute
by Function
1920-21

Service departments with supervising connection with the:

① Health Officer

② Commandant

③ Agricultural, instructional department

All instructional and service departments have financial and

accounting connection with the Business Manager

Departments include "Extension"

activities under the Director

In some cases an individual will hold

more than one of the positions.

All of the curricula of the college have been completely reorganized and modernized. The general curriculum in agriculture has been superseded by six co-ordinate curricula, in agricultural education, agricultural engineering, agronomy, animal husbandry, dairy husbandry, and horticulture. Curricula in industrial education and commercial engineering have been established, co-ordinate with the other four-year engineering curricula. The civil engineering curriculum now permits specialization in highway engineering; and the mining engineering curriculum permits specialization in coal mining engineering. The curriculum in general science has been eliminated, but four-year programs are maintained in biology, chemistry, geology, and metallurgy; and a definitely outlined pre-medical curriculum has been provided. A two-year curriculum in practical mechanics and a short unit course in printing have been added. Foreign languages are elective but no longer required.

New departments have been developed in agricultural engineering, education, industrial education, physical education (including hygiene, and physical training), poultry husbandry, social science (including agricultural economics, industrial economics, citizenship, human relations, and a number of courses in business administration, business law, finance, accounting, etc.) In the department of English, courses in agricultural journalism, technical English, and public speaking, have been inaugurated.

A credit-hour system, such as is in operation at the best colleges of the country, has been in use for the past two years, in the effort to apportion equitably a student's time among the various departments in which he is working.

The marking system of the college has been completely changed, for the first time in thirty years; and a modern system of quality-credits and symbols has been adopted. Minimum standards of scholarship have been set, below which if a student falls he is required to leave the institution. Students whose conduct or classwork is below the standard have been consistently dropped from the rolls during the current year.

The regulations for the government of the students have been completely revised.

The annual catalog has been completely re-written; and the bulletin has been changed from a quarterly to a bi-monthly, with a definite objective for each number during the year.

A department of industrial education for teacher-training in trades and industries, under the Smith-Hughes law, has been established; and this department in addition to its resident instruction offers extension courses for teachers in service.

A department of health, with a full-time health officer, has been provided.

The laboratories of the State Highway Commission for the testing of road materials, have been established at this college as a part of the department of civil engineering.

An engineering experiment station has been started, on a modest basis, and this has already done some good work.

The number of United States army officers regularly assigned to the college has been increased from two to seven, and in addition seven sergeants and two mechanics have been detailed here from the regular army. R. O. T. C. units in coast artillery, engineering, and infantry are regularly maintained, on a large scale.

The old brick shops building has been converted into a military laboratory with shooting-gallery and rooms for various military purposes. The outdoor rifle range has been improved and a pistol range established. Approximately three hundred thousand dollars worth of military equipment has been added by the War Department, chiefly for the coast artillery and engineering units. Many new instruments have been supplied for the use of the band.

For three successive years the institution has been given the highest military rank by the War Department, as a "distinguished college"; yet this college claims to be merely a technical institution with a military department.

The athletic interests have been brought into closer connection with the college organization, the athletic director being made a member of the faculty and the athletic coaches having regular rank on the instructional staff. Mass athletics and minor sports are being greatly developed, and physical education and hygiene are now required of all freshmen and are elective for others.

The college has joined the southern intercollegiate athletic conference, composed of fifteen of the leading institutions in this section, and this has established very important regulations for raising and maintaining athletic standards.

A subsidiary athletic field has been graded by the Athletic Association. The college has constructed a number of additional tennis courts and has added to the gymnasium a considerable amount of equipment for indoor sports.

The enrolment of regular session students has been more than doubled since 1919, being now 980, which is more than thirty-four per cent greater than the enrolment of any previous year in the history of the college.

The entrance requirements have been raised from fourteen units, with conditional entrance allowed on twelve units, to fifteen units with no quantitative conditions whatever, and admission has been restricted to graduates of accredited four-year high schools and other institutions recognized as standard by the State Department of Public Instruction and the state university, thus bringing the requirements for admission to the highest standard.

Women have been admitted to all curricula of the college on the same basis as men.

The time devoted to term examinations has been cut to about one-half, thus affording more time for actual instruction; and classes are started on the second day of the session instead of using four or five days for registration as formerly.

Orientation and introductory courses for freshmen have been inaugurated. Faculty advisers have been appointed for students. The student assembly has been revived.

Eight teaching fellowships for graduates of this and other institutions have been established.

Three undergraduate scholarships have been established, for the students who lead in scholarship in the freshman, sophomore, and junior classes respectively.

A chapter of the honor society of Phi Kappa Phi has been inaugurated, to which members of the faculty in limited number and a likewise limited number of senior students are eligible strictly on a basis of scholarship.

The literary societies have been revived after being dead for several years; and despite the fact that because of over-crowded conditions it has been necessary to use their halls for classroom purposes, they have grown in numbers and in interest, and the first public program in many years was held this year.

The state appropriations to the college proper have been increased 106 per cent, to the experiment station 73 per cent, to the extension division 118 per cent, and to certain affiliated interests 48 per cent, with an increase in the total for all divisions of 100 per cent over 1918-19.

Federal funds for teacher-training in vocational agriculture and for extension work in agriculture and home economics have been increased.

The loan funds and scholarships have been enlarged.

The service and commercial departments have been put on a business basis. The accounting has been centralized in one business office. The entire institution has been placed on a budget system, with a definite allocation of funds and with control of expenditures through the central business office. A requisition system for purchases and also for job-work has been put into operation. The office of business manager has been created.

The floating debt has been reduced to a comparatively small amount, being now only about one-half of its amount three years ago. During the three years now closing neither the bonded debt nor the floating debt has been increased. The sinking-fund for the bonded debt is being built up. A reserve fund is being accumulated to meet claims under the workmen's compensation law.

A new and more equitable salary scale, providing definite ranges of salaries for the various grades of positions, has been adopted for the instructional staff; and a definite and fair plan of house assignment for professors has been established.

The salaries of members of the faculty have been increased by an average of about thirty per cent in three years; and the salaries of all other employees have been proportionately increased. .

A splendid farm of 176 acres has been purchased and paid for in full. Another tract of about ten acres has been acquired, and also a lot of about two acres, both being paid for at the time of purchase.

A small building has been erected for the department of agricultural education, of which a portion is now used for the department of industrial education and also for an office for the alumni association.

One professor's house has been added by purchase and another by erection. A brick, two-story apartment house, for four families, has been erected by the extension division. Two cottages have been erected for farm labor. All of these have been paid for in full.

A large wooden structure has been erected to house the farm machinery secured by the department of agricultural engineering.

A poultry plant of considerable proportions is being developed.

A printing department, which publishes the bulletins, catalogs, etc., of the college, and trains linotype machine operators, has been established and is being operated with a large output of work.

A large storage yard, with sheds, stables, and other structures, has been provided near the campus, permitting the removal of a number of unsightly structures from the campus.

Many new walks have been made on the campus, some of the drives have been laid out anew, sodding and planting have been done in various places.

The farm plant is now in process of renovation, several buildings have been considerably enlarged, new structures have been erected, old and dilapidated fences are being replaced by modern fencing, considerable grading and clearing up of the grounds has been accomplished, and all of the barns and sheds have been painted, so that when these improvements are completed the entire farm plant will have been overhauled and put in good condition.

The attic of the agricultural hall has been developed for agronomy laboratories, and the space allotted to dairy husbandry has been increased by providing new quarters for stock-judging. Improvements have been made in the science hall, strengthening the building and better adapting it to the heavy use which is made of it. Steps have been built at the front of the mechanic arts building, and the two tower rooms have been developed for use as highway engineering testing laboratories. Certain offices in the administration building have been greatly improved, and various other improvements of a more or less important character have been made.

The interior of Academic Building No. 2 has been completely remodeled so as to economize space and to make available an additional story, but this work has not been entirely finished.

Improvements, at considerable expense, have been made to the water-supply system and to the sewage disposal plant.

Improvements have been made to the laundry building and a considerable amount has been expended for new laundry machinery.

A new engine and dynamo room has been built at the power plant, and the old engines, dynamos, and accessories have been completely replaced with modern equipment, giving increased and better distributed capacity. The old engine room is being converted into an experimental engineering laboratory. The lights on the streets of the town and on the campus, for the most part, have been put on a series system with control at the power-plant. The distribution system has been re-arranged in a number of independent circuits, each with central control. A large number of additional lights have been placed on the grounds.

Practically every building on the campus has been painted on the outside, and some also on the inside. The interior of the assembly hall has been completely renovated, with important changes to the stage.

The Y. M. C. A. building has been greatly improved inside, through the efforts of the ladies' auxiliary and other friends.

The laboratory equipment of all departments has been largely increased, in some cases more than doubled. A large amount of valuable engineering equipment has been added, particularly for experimental engineering, electrical engineering, and mechanic arts. Many additions have been made to the libraries. Much general classroom and office furniture has been added. Equipment for fire protection has been increased.

Contract has been made for the building of a bituminous macadam road, sixteen feet in width, from the alumni gateway to the Y. M. C. A. building, and of a similar road, twelve feet in width, from the street to the power-plant, so that these roads will be no longer impassable in winter.

Plans have been made for remodeling the kitchen wing of the dining-hall, and for remodeling the hospital; and the work will be completed during the coming summer.

Funds have been made available for remodeling the heating system of the library building, and this will be made comfortable before next winter.

Funds have been provided and plans are now being made for the establishment of beef-cattle herds in the department of animal husbandry.

SERVICE ORGANIZATION

1. Resident Instruction.

Trains young men and young women for gainful occupations needed in Virginia, and for useful public service and intelligent citizenship.

Four-Year Courses in

Agriculture—Agricultural Engineering, Agronomy (Farm Management), Animal Husbandry, Dairy Husbandry, Horticulture, Agricultural Education.

Engineering—Chemical, Civil, Commercial, Electrical, Mechanical, Mining, Industrial Education.

Applied Science—Biology, Chemistry, Geology, Metallurgy.

Graduate Courses in

All of the above lines.

Two-Year Courses in

Practical Agriculture, Home Demonstration, Pre-Medical Education.

Short Unit Courses in

Agriculture, Printing (Linotype).

Summer Courses in

Vocational Agriculture, Trades and Industries, Certain College Subjects, and Certain Entrance Unit Subjects.

2. Experimentation and Research.

Answers by carefully planned experiments the fundamental problems in farm management and practise, under local conditions.

Agricultural Experiment Station

Investigation as to crops, soils, fertilizers, feeds, feeding, plant and animal breeding, orcharding, dairying, diseases of plants and animals, insect pests, etc. Bulletins mailed free to farmers.

Eight County Experiment Stations

Local farm problems studied.

Leased and Co-operating Orchards

Local experiments in orcharding in the fruit-growing sections.

Crop Pest Commission

Control of insect pests and plant diseases. Bulletins mailed free.

Virginia Truck Experiment Station

Not under college control, but closely affiliated for helpful co-operation. Truck experiments and local problems of Eastern Virginia studied. Bulletins mailed free.

3. Extension Service.

Carries the College and Experiment Station to the farm and home, furnishes practical information of immediate application.

Extension Division

County Agent work in Agriculture and Home Economics. Boys' and Girls' Clubs. Farmers' organizations. Farmers' Institutes and other meetings, lectures, and demonstrations. Plans for farm engineering, etc. Exhibits at fairs. Bulletins mailed free. Advice to farmers, farmers' wives, boys and girls, by correspondence and visits by specialists, on technical phases of farming and household work. All service free.

ENROLLMENT BY YEARS

(Regular session only—short course omitted.)

1872-73	132	1897-98	333
1873-74	197	1898-99	303
1874-75	222	1899-00	343
1875-76	255	1900-01	386
1876-77	224	1901-02	472
1877-78	186	1902-03	627
1878-79	160	1903-04	727
1879-80	50	1904-05	728
1880-81	78	1905-06	619
1881-82	148	1906-07	577
1882-83	163	1907-08	546
1883-84	190	1908-09	565
1884-85	132	1909-10	509
1885-86	(?)	1910-11	471
1886-87	110	1911-12	463
1887-88	132	1912-13	471
1888-89	127	1913-14	527
1889-90	139	1914-15	490
1890-91	150	1915-16	505
1891-92	135	1916-17	533
1892-93	177	1917-18	519
1893-94	236	1918-19	477
1894-95	325	1919-20	757
1895-96	335	1920-21	793
1896-97	336	1921-22	975

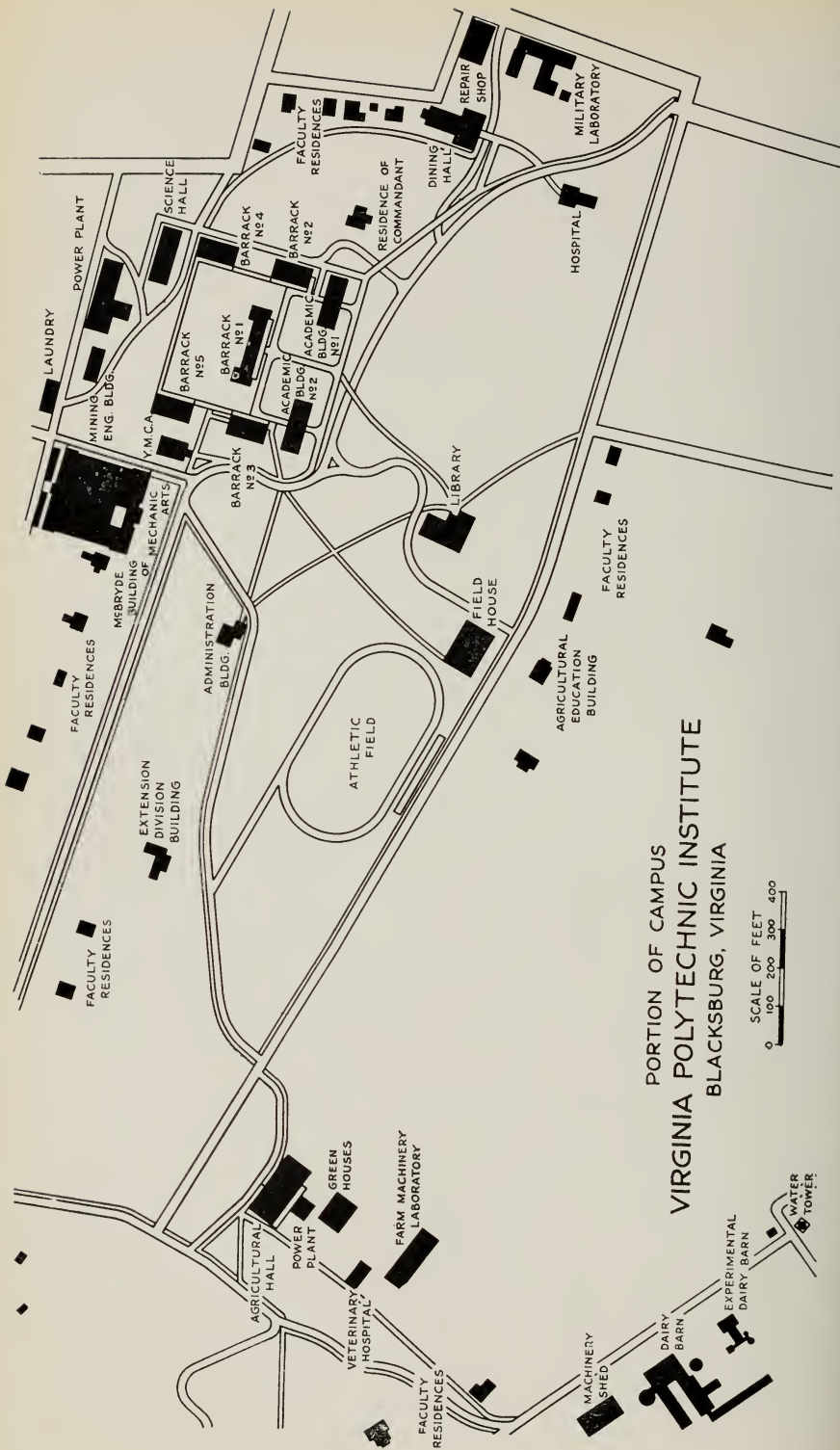
Prior to 1912-13 the entrance requirements were not clearly defined in terms of units. In 1912-13 they were made 10 units, in 1914-15 they were raised to 14 units, and in 1920-21 they were raised to 15 units, with two conditioned units allowed. For 1922-23 the full 15 units will be required, no conditions in quantity being allowed.

SUMMARY OF GRADUATES BY CLASSES AND COURSES

CLASS	COURSE																
	Agricultural Education	Agriculture	Horticulture	Applied Chemistry	Applied Geology	Applied Biology	Preparatory Medicine	Metallurgy and Metallography	Chemical Engineering	Agriculture and Mechanics	General Science	Civil Engineering	Mechanical Engineering	Electrical Engineering	Mining Engineering	Totals	Deceased
1875		6								3			3			12	4
1876		22								4						26	10
1877		9								8						17	3
1878		9								2						11	5
1879		7								5						12	5
1880		6								3						9	3
1881		3								4						7	1
1882		8								3						11	3
1883		5											5			10	2
1884		6								2						8	
1885		3								1						4	
1886		5											1			6	1
1887		3														3	1
1888		2									3	1	3			9	
1889		2								3			2			7	
1890		1										1	3			5	
1891		1								1			2			4	2
1892				2								1				5	
1893		2								1	1	2				6	
1894		1		4								1	1	3		9	1
1895		1		5						4		1	6	1		18	6
1896			1	2						2		7	7	6		19	1
1897		1	1	2						4	2	3	7			20	2
1898			1	4						3	1	5	3			17	1
1899		1		5						2	5	8	5			26	5
1900		1		5						4	4	5	6			25	3
1901		2	1	4						2	6	9	11			35	
1902		1	1	5						6	6	17	7			43	1
1903		2	3	3			1			2	4	8	11			34	6
1904		2	4	9						3	9	13	19			59	10
1905		9	2	8			1			3	15	16	23			77	4
1906		6	4	4			1			2	20	11	17			65	2
1907		7	2	3			1				25	11	21			70	4
1908		4	1	4						1	17	8	7			42	2
1909		2	2	8				2		1	11	6	13			45	
1910		4	1	5	2						11	5	19		1	48	2
1911		7	3	9							16	14	16		4	69	3
1912		8	1	3							6	8	16		2	44	
1913		14	2	5							6	9	9		2	47	4
1914		8	1	4		1					5	11	21	1		52	
1915		18	3	4							9	10	14	2		60	5
1916		25	1	3					1		7	14	23		3	77	3
1917		23	1	2				1	2	1	5	9	23			67	1
1918		6	1	4							5	3	10			29	
1919		8	1	3	1				4		1	7	10		1	36	
1920	6	21	1	2					8		9	14	17		1	79	1
1921	2	11		4		1			11			16	16	14		75	
Totals--	8	294	39	125	3	2	4	3	26	35	48	226	277	352	17	1459	109

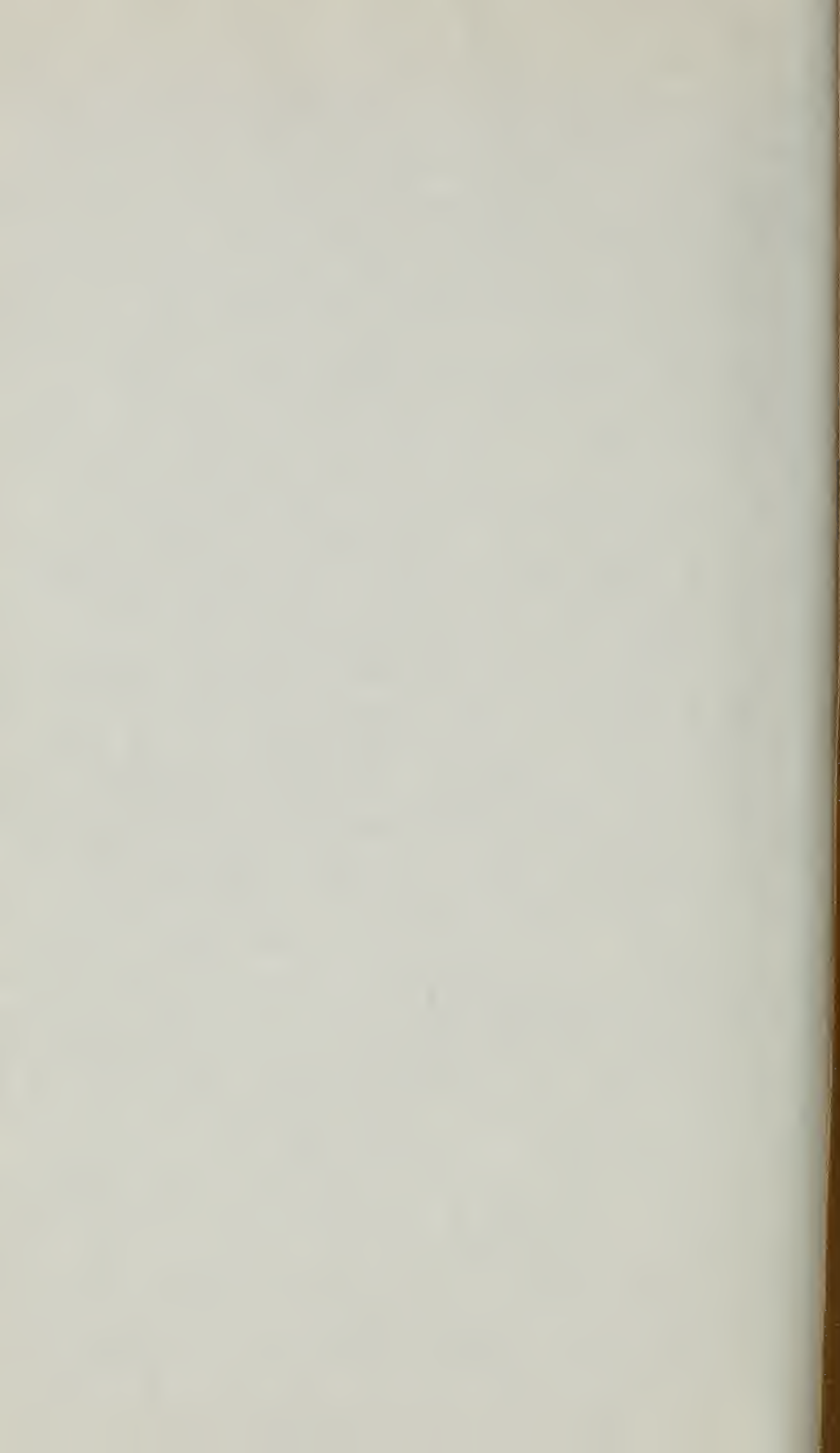
GRADUATE DEGREES AWARDED

YEAR	DEGREE						Totals
	M. S.	Ch. E.	C. E.	E. E.	E. M.	M. E.	
1893	1						1
1894	1		1			1	3
1895	1					2	3
1896	5					1	6
1897	2		1			2	5
1898			1			2	3
1899	2					1	3
1900	2		4			4	10
1901	2		2			2	6
1902			2			7	9
1903	6		2			8	16
1904	4		3			7	14
1905			6			10	16
1906	1		3			4	8
1907			5			8	13
1908	3		12			6	21
1909	3		7			4	14
1910	3		4	5		3	15
1911	2			3		4	9
1912			7	1	1	6	15
1913	4			4		5	13
1914	1			4		2	7
1915	9			2		2	13
1916	7		3	4		1	15
1917	1		3	5	2	1	12
1918	1					2	3
1919	5		1			2	8
1920	3	1		2		1	7
1921	4	1	3				8
Totals	73	2	70	30	3	98	276



THE COLLEGE AND THE STATE

THE CHIEF CONCERN of a state should be the development of intelligence and integrity among its citizens. This is the sole foundation for permanent progress and prosperity. Material resources are an immense advantage, but brain power is necessary to bring them to fruition, and virtue is essential to the perpetuation of the commonwealth. The chief business of the college is to train minds and develop characters for service to the state. The objectives of any state-supported institution must be what the state needs to have done by that particular institution. All claims for support from the state must be based on clearly defined needs to reach these objectives. Only in the degree to which a state college uses its facilities to meet the demands which the state rightfully makes of it, can it expect support from the state. Only in the degree to which the state supports its state college can the state reasonably expect that college to meet the demands of the state.



UNIVERSITY OF ILLINOIS-URBANA



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